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ABSTRACT

This paper examines trends in the supply and demand for elementary and secondary teachers in Australia, concluding that, overall, a sufficient supply of qualified teachers should be available to meet the expected slight increase in demand for teachers from 1998-2001. Data come from a mandated monitoring of and annual report on the supply and demand of teachers. Section 1, "Demand for Teachers," includes information on "School Aged Population," "School Retention Rates," "Student Enrollment Trends," "Student/Teacher Ratios," "Employment Trends and Prospects: Government Sector," and "Impact of Overseas Demand." Section 2, "Supply of Teachers," discusses "Employment," "Training," "Unemployment," "Pool of Available Teachers," "Graduate Employment Outcomes," "Immigration to Australia," "Interstate Mobility," "Wastage," "Graduate Destinations," "Job Mobility," and "Earnings." Section 3, "Age Profile of Teachers," discusses "Age Structure: All Teachers," "Age Related Issues," and "Age Structure: Government Sector by State/Territory." Section 4, "Labour Market Outlook for Teachers," discusses "Balance of Demand and Supply," "Sensitivity Analysis," "Teacher Recruitment: Government," "Specializations Experiencing Recruiting Difficulties," and "Prospects for Teachers." Section 5, "State/Territory Teacher Labour Markets," discusses "New South Wales," "Victoria," "Queensland," "Western Australia," "South Australia," "Tasmania," "Northern Territory," and "Australian Capital Territory." The four appendixes present data on school students by age, school students by state, consolidated tables from state and territory survey returns, and teaching students: commencements and completions. (SM)

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ED 433 300

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SCHOOL TEACHER

DEMAND AND SUPPLY

PRIMARY AND SECONDARY

prepared by

National Teacher Supply and Demand Working Party
Conference of Education System Chief Executive Officers

July 1998

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SCHOOL TEACHER DEMAND AND SUPPLY

PRIMARY AND SECONDARY

CONTENTS

page

EXECUTIVE SUMMARY i

Introduction to report 1

A. DEMAND FOR TEACHERS 2

Demand Summary 2

School Aged Population 2

School Retention Rates 3

Student Enrolment Trends 4

Student/Teacher Ratios 6

Employment Trends and Prospects - Government Sector 8

Impact of Overseas Demand 10

B. SUPPLY OF TEACHERS 13

Supply Summary 13

Employment 13

Training 15

Unemployment 19

Pool of Available Teachers 19

Graduate Employment Outcomes 20

Immigration to Australia 21

Interstate Mobility 21

Wastage 22

Graduate Destinations 24

Job Mobility....24

Earnings....26

C. AGE PROFILE OF TEACHERS....28

Age Structure - All Teachers....28

Age Related Issues....28

Age Structure - Government Sector by State/Territory....30

Implications of Age Profile....33

D. LABOUR MARKET OUTLOOK FOR TEACHERS....34

Balance of Demand and Supply....34

Sensitivity Analysis....34

Teacher Recruitment - Government....35

Specialisations Experiencing Recruiting Difficulties....36

Prospects for Teachers....38

Recruitment Strategies....38

E. STATE/TERRITORY TEACHER LABOUR MARKETS....40

New South Wales....41

Victoria....43

Queensland....44

Western Australia....45

South Australia....46

Tasmania....47

Northern Territory....48

Australian Capital Territory....49

APPENDICES

Appendix A School Students by Age....50

Appendix B School Students by State....52

Appendix C Consolidated Tables from State and Territory Survey Returns....56

Appendix D Teaching Students - Commencements and Completions....62

SCHOOL TEACHER DEMAND AND SUPPLY PRIMARY AND SECONDARY

EXECUTIVE SUMMARY

Labour market summary

At present difficulties in recruiting teachers are limited mainly to particular specialisations of *secondary* teachers, including Languages Other Than English (LOTE), physical education and mathematics/science. The average age of primary and secondary teachers has risen in recent years, contributing to concerns about increased recruiting difficulties in the next few years. A decline in the number of students *completing* relevant higher education courses during the 1990s has added to these concerns.

This paper examines trends in the demand and supply for both primary and secondary teachers and concludes that, overall, a sufficient supply of qualified teachers should be available to meet the expected slight increase in demand for teachers over the period 1998 to 2001. The legacy of low demand for teachers in the early to mid 1990s is a large pool of qualified teachers not presently employed as teachers. Although only some of those in this pool would be available for new teaching positions, this potential supply of teachers will augment the supply of those completing relevant higher education courses.

While the age profile of teachers has shifted to the older age groups, the dominant cohort is those aged 35 to 44 years. This suggests that the age profile will impact markedly on teacher supply in the longer term rather than the next few years, although there are significant differences in the age profile between the various States and Territories. Prospective recruiting difficulties for particular specialisations need to be addressed in teacher recruitment strategies.

Demand for teachers

The main aspects of the projected demand for primary and secondary teachers over the next five years are likely to be a pick up in growth in secondary school enrolments, an increase in retention rates to years 11 and 12, and continued strong growth in non-government school student numbers in some states/ territories.

Over the five years to 2002 the *population* in both the primary age group and the secondary age group are each projected to grow by 2.6 per cent: virtually no change in growth for the primary age group and a slowing in growth for the secondary age group.

Between 1992 and 1997 the year 10, year 11 and year 12 *retention rates* fell, but changes to youth income support, especially the Youth Allowance, and enhanced vocational orientation in years 11 and 12 are expected to reverse these trends and add to the demand for teachers.

- Although the overall impact on secondary teacher demand would be small, the effect would clearly be more pronounced at the year 11 and 12 level.

Growth in *primary* school enrolments for all sectors is expected to slow from 2.8 per cent in the five years to 1997 to 1.7 per cent in the five years to 2002. Government primary school enrolments are projected to rise only marginally (0.3 per cent), with almost all of the growth in the non-government sector (5.5%).

Stronger growth is expected for *secondary* school enrolments with a more than doubling from 1.6 per cent in the five years to 1997, to 3.6 per cent in the five years to 2002. This will add to the demand for Secondary School Teachers and could exacerbate recruitment difficulties in some specialisations.

- Over the five years to 1997 student enrolments in government secondary schools fell by 2.2 per cent. This trend is expected to be reversed with growth of 0.5 per cent in the five years to 2002; and
- Strong growth in secondary school enrolments in the non-government sector (9.8 per cent between 1992 and 1997) is projected to continue (9.3 per cent in the five years to 2002).

The student/teacher ratio is a key factor in determining the demand for teachers. While very little change is expected in the ratio in government primary and secondary schools over the next few years, a shift of students to the Anglican and/or "other" non-government schools would add to teacher demand because of their lower student/ teacher ratio.

Supply of teachers

The combined employment of primary and secondary school teachers has remained fairly steady during the 1990s, according to estimates from the Australian Bureau of Statistics (ABS) Labour Force Survey, averaging 226,000 to 239,000. In 1990 the combined employment of primary and secondary school teachers represented 2.9 per cent of total employment.

- The number of *primary school teachers* employed in the government sector was around 76,700 in 1997 and employment is expected to grow slightly to 78,000 in 2001 (a rise of 1.7 per cent between 1997 and 2001 is projected).
- The number of *secondary school teachers* employed in the government sector was around 68,200 in 1997 and is expected to increase to 68,500 in 1998. The number of teachers in 2001 is expected to be at a similar level to 1998 (a rise of 0.6 per cent between 1997 and 2001 is projected).
- Over the five years to 1997 the number of teachers employed in non-government schools rose by 13.5 per cent to 61,500.

Almost 80 per cent of employed Primary School Teachers and 55 per cent of Secondary School Teachers were females in 1997 (annual average figures), almost four percentage points higher than in 1990 and well above the proportion females represent of total employment (43 per cent in 1997).

Net migration of primary and secondary school teachers appears to have peaked in the early 1990s and is now a relatively small element of supply. *Overseas recruitment* has not significantly

impacted upon local supply, but if potential shortages in the United Kingdom, New Zealand and the United States were to result in large scale recruitment campaigns in Australia, any local recruitment difficulties could worsen.

The number of graduates *completing* suitable higher education courses has fluctuated in the 1990s, with a declining trend evident. *Commencements* of Initial Primary and Secondary School Higher Education courses show only a slight downward trend in recent years (1993 to 1996), indicating that the decline in completions may ease.

- The number of students completing Initial Primary School Higher Education courses was 41.1 per cent lower in 1996 than in 1989.
- The number of students completing Initial Secondary School Higher Education courses was 20.6 per cent lower in 1996 than in 1989.
- Employment outcomes for education graduates have improved since the early 1990s, suggesting some tightening in the teacher labour market.

While in recent years there is evidence of a decline in the salaries for *primary* school teachers relative to those of all professionals and all employees, this trend is not evident for relative salaries for *secondary* school teachers.

Information is available in some States/Territories on the pool of qualified teachers who may be available for teaching positions. The *NSW Department of Education and Training* list of teachers seeking employment grew from 6,000 in 1992 to 15,500 in late 1997.

- Not all those on the waiting list would be available or suitable for vacancies that may arise and some would be employed in other occupations.

Age profile

A comparison of the employed teachers average age profile for 1988-92 with that of 1994-98 indicates that those aged 45 and over increased by about 4.5 percentage points for primary school teachers and by 7.5 percentage points for secondary school teachers.

- School teachers are relatively more concentrated than all professional occupations in the 35 to 44 and 45 to 54 year age ranges, but then appear to leave the profession more rapidly, being relatively under-represented in the 55 and over age ranges.

Nevertheless, the teaching workforce remains concentrated in the 35 to 44 year age group (around 40 per cent of both primary and secondary teachers), suggesting that the age profile for teachers may not impact substantially on teacher supply in the next few years.

- The (albeit) limited information available on reasons for separations from teaching employment, especially relatively low levels of retirements, supports this view.

The longer term effects of the age profile are likely to be considerable if recruitment levels are low. This applies particularly to the government sector where the proportion of teachers aged 45 years and over (around 40 per cent for both primary and secondary teachers) is considerably higher than for all school teachers.

- The proportion of *primary* teachers aged *45 years and over* varies from the lowest of 30.0 per cent in Queensland to a very high 54.1 per cent in the ACT.
- The proportion of *secondary* teachers aged *45 years and over* varies from the lowest of 32.1 per cent in Queensland to a very high 53.7 per cent in the ACT.

Labour market outlook

Three key variables are likely to have a significant influence on future teacher supply: completions of initial education courses; the pool of qualified teachers not currently employed as teachers; and separation rates from teaching.

Overall a sufficient supply of teaching graduates is likely to be maintained, although the downward trend in completions during the 1990s is of concern. Monitoring of trends in both completions and commencements is important in view of the longer term impact of the age profile of the teaching workforce.

Although the demand for teachers has improved, the legacy of low demand in the early to mid 1990s is a large pool of teachers either unemployed, working in alternative full-time or part-time employment, or not in the labour force. While some of these will remain in, or gain, alternative employment many are seeking a longer term career in teaching and represent a significant source of supply, especially if the demand for teachers improves.

Information available on separations from teaching does not indicate significant wastage of qualified teachers through early retirement and teachers moving to non-teaching jobs. More information on, and closer monitoring of, teacher separations would be helpful in providing more reliable conclusions on the prospects for separations over the next few years.

Given the possibility of increased recruitment difficulties in the medium to longer term, it would be desirable to target recruitment strategies to areas of specialisation and for regional areas that are already showing evidence of recruitment difficulty.

- At present, recruiting difficulties for secondary school teachers are restricted to particular specialisations, such as industrial arts, Languages Other Than English (LOTE), physical education and mathematics/science.

Demand for secondary school teachers is likely to increase as a response to demographic changes, the possible effects of the Youth Allowance on retention rates, growth in the non-government school sector, and some increased recruitment associated with higher flows out of teaching due to retirement. Lower numbers of graduates may improve the employment prospects for new teaching graduates and qualified teachers not presently working in teaching positions.

Anyone with an appropriate Bachelor degree could qualify as a secondary school teacher by completing a relevant postgraduate course and thus add to the supply of qualified teachers within a shorter time frame than is feasible through undergraduate courses.

It follows that any potential shortfall in training could be addressed relatively quickly, assuming there is a ready supply of graduates in the required *areas of specialisation*.

SCHOOL TEACHER DEMAND AND SUPPLY PRIMARY AND SECONDARY

INTRODUCTION

In 1997 the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) resolved that the Standing Committee (Schools) should monitor the demand and supply of teachers and provide MCEETYA with an annual report. MCEETYA requested the Conference of Education Systems Chief Executive Officers (CESCEO) to consider putting in place procedures to enable annual monitoring and reporting on the labour market for teachers. At its meeting in September 1997 CESCEO undertook to implement the MCEETYA decision by working with the Department of Employment, Education, Training and Youth Affairs (DEETYA) in developing a process for aggregating teacher supply and demand data.

As part of the process DEETYA undertook to prepare a paper on primary and secondary school teacher supply and demand. The Department regularly monitors occupational labour markets with a particular emphasis on identifying existing or emerging skill shortages, including at the State and Territory level. This monitoring process involves contact with employer and professional associations, trade unions, educational and training institutions, and government departments, authorities and instrumentalities and includes examination of available qualitative and quantitative information. This work is undertaken in large part by State/Territory based Labour Economics Offices (LEOs) of the Department.

- In April 1997, as part of this monitoring process, DEETYA released a paper on secondary school teacher supply and demand. This paper builds upon the analysis undertaken for the April 1997 paper and supplied to CESCEO.

This ongoing monitoring process indicates that some specialisations of secondary school teachers have experienced some recruitment difficulties in one or more State/Territories from at least the early 1990s. While specialisations with recruitment difficulties have varied over time, Mathematics/Science and Languages Other Than English (LOTE), particularly Asian languages such as Japanese and Indonesian, were often considered as having recruitment difficulties.

- The monitoring also suggested that many areas of secondary school teaching were not in shortage during the period. Primary school teachers have not generally been in shortage.

Despite the present situation of adequate overall supply, concerns have been expressed that more general teacher shortages may emerge in the next few years. This paper seeks to examine the outlook for primary and secondary teachers, with the focus on the next five year using 1997 as its base year.

This report is focussed on the issue of teacher demand and supply. Accordingly it does not canvass such issues as:

- quality of teachers and of students entering teacher education;
- desirability of increasing the proportion of male teachers, particularly in primary schools; and
- need for on-going professional development of teachers, particularly in areas such as information technology, given the age profile of the teaching workforce.

PART A: DEMAND FOR TEACHERS

Demand Summary

The school aged population and school enrolments are anticipated to grow in the next five years, albeit by only ***around 2.5 per cent,*** broadly similar to the overall growth from the early to mid 1990s. Enrolment growth should be lower for primary schools (1.7 per cent) than for secondary schools (3.6 per cent). Student growth is expected to be concentrated in the non-government sector where (except for the Catholic sector) there are lower full-time student to teacher (full-time equivalent) ratios than in the government sector. The non-government sector (including the Catholic sector) has had declining student to teacher ratios. A continuation of these trends would tend to increase demand for school teachers. Any reversal of the recent trend of declining apparent retention rates for secondary students, for example in response to the Youth Allowance, would increase teacher demand, especially for years 11 and 12.

The impact of governments' policies, in areas such as class sizes, school closures and the distribution of schools, and teacher salaries and working conditions, is difficult to anticipate. The main effect of such policies is likely to be on the government/non-government mix of enrolments and associated teacher demand. If present student to teacher ratios are maintained, any shift of students to the Anglican and/or "other" non-government schools would add to teacher demand.

Introduction

The main factors influencing the demand for primary and secondary school teachers are: the number of school-aged persons and apparent school retention rates (determining the number of *students enrolled in schools*) and student to teacher ratios (determining the number of *teachers employed*). The policies of State, Territory and Federal Governments and non-government schools will affect these demand factors, including the mix of courses and associated specialisations and the split between government and non-government students.

School Aged Population

Some 94 per cent of full-time primary school students are aged from under 5 to 11 years and 97 per cent of full-time secondary school students are aged 12 to 17 years (details provided in Appendix A). Over the five years to 1997 the population in the age range 5 to 11 years (primary school) rose by 2.7 per cent to 1,828,100 and the population aged 12 to 17 years (secondary school) increased by 3.7 per cent to 1,559,400, according to ABS estimates of residential population.

- Over the five years to 2002 the *primary age group* and the *secondary age group are each projected to grow by 2.6 per cent:* virtually no change in growth for the *primary age group* and a slowing in growth for the *secondary age group*.

School Retention Rates

An influence on the demand for secondary school teachers is the *apparent retention rate* in the last years of schooling. These are the years when students have the option of leaving the school system. Apparent retention rates of full-time secondary school students to Years 10, 11 and 12 peaked in 1992 (during the recession) and then fell to a recent low point in 1995, for Years 10 and 11, and 1996 for Year 12. Improvements in labour market conditions and job prospects for those leaving school may have had a negative impact on retention rates during this period. In 1997 there was a modest recovery in apparent retention rates, including a 1.0 percentage point rise for the year 11 retention rate.

- Over the five years to 1997 the year 10, year 11 and year 12 retention rates fell respectively by 1.9, 3.4 and 5.3 percentage points (see Table 1).

TABLE 1: APPARENT RETENTION RATES FOR FULL-TIME SECONDARY STUDENTS TO YEAR 10, YEAR 11 AND YEAR 12, AUSTRALIA, 1990 TO 1997

Year	Year 10	Year 11	Year 12
1990	98.2	80.5	64.0
1991	98.8	86.0	71.3
1992	**99.1**	**87.8**	**77.1**
1993	98.3	87.4	76.6
1994	97.0	85.3	74.6
1995	96.4	83.3	72.2
1996	96.7	83.4	71.3
1997	**97.2**	**84.4**	**71.8**

Source: ABS, *Schools Australia, 1995* and *1997* (Cat.No. 4221.0)

Changes to youth income support, especially the Youth Allowance, is expected to impact on retention rates to years 11 and 12. Further, enhanced vocational orientation in years 11 and 12 may also result in some increase in retention rates. If this eventuated, student enrolments and the demand for teachers would rise. Although the overall impact on secondary teacher demand would be small, the effect would clearly be more pronounced at the year 11 and 12 level. Importantly, there could be increased demand for vocationally oriented teacher specialisations.

Sensitivity: Retention Rates

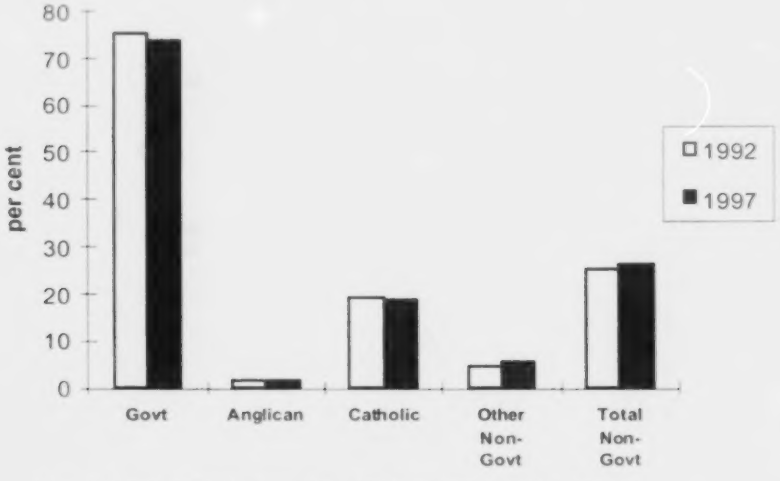
A. Assume the following rises in the retention rate (from the 1997 level): 1.0 percentage point to year 10; 2.0 percentage points to year 11; and 3.0 percentage points to year 12. Overall secondary teacher demand would increase by *around 1,200 or 1.1 per cent*; importantly, year 11 demand would grow by 2.4 per cent; and *year 12 by 4.2 per cent.*

B. Doubling of the above rises would take the retention rates just above the record levels recorded in 1992. Secondary teacher demand would *rise by 2,400 or 2.2 per cent*, while year 11 demand would rise 4.7 per cent; and *year 12 by 8.4 per cent.*

Student Enrolment Trends

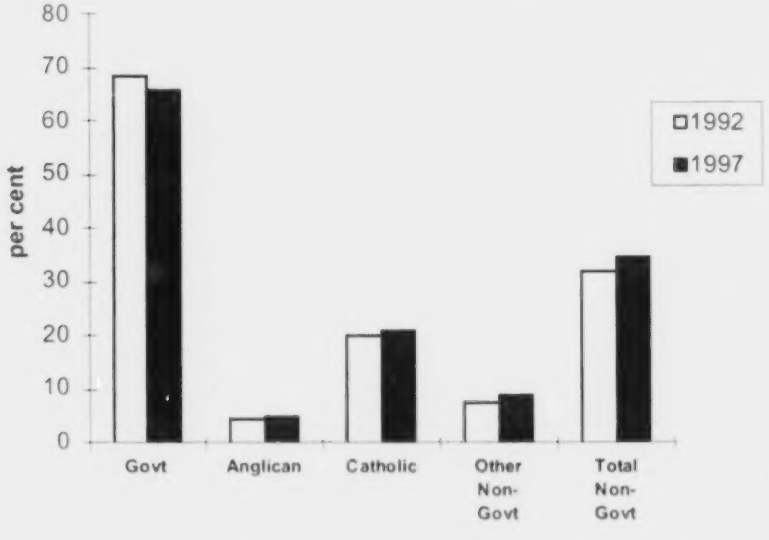
The number of full-time students rose by 2.3 per cent over the period 1992 to 1997, with primary school students increasing by 2.8 per cent and secondary students by 1.6 per cent (see Table 2). Government sector enrolments *fell* by 0.2 per cent, whereas non-government sector enrolments *rose* by 8.9 per cent. Figures 1 and 2 indicate that from 1992 to 1997 the non-government sector increased its share of full-time students in both the primary and secondary level of school education. Australia and state/territory data is presented in Appendices A and B.

FIGURE 1:PROPORTION OF FULL-TIME PRIMARY STUDENTS BY CATEGORY OF SCHOOL, 1992 AND 1997



Source: ABS, *Schools Australia, 1992 &1997* (Cat.No. 4221.0)

FIGURE 2: PROPORTION OF FULL-TIME SECONDARY STUDENTS BY CATEGORY OF SCHOOL, 1992 AND 1997



Source: ABS, *Schools Australia, 1992 &1997* (Cat.No. 4221.0)

DEETYA's projections of primary and secondary school enrolments to the year 2002 are presented in Table 2. These projections are based on ABS population estimates and the assumption that grade progression rates (the proportion of students moving to the next year of schooling) in 1996-97 will continue.

TABLE 2: SCHOOL ENROLMENTS - ACTUAL AND PROJECTED

	Actual		Projected	% change		
	1992 '000	1997 '000	2002 '000	1992-1997	1997-2002	1992-2002
PRIMARY						
GOVT	1351.6	1367.0	1371.5	1.1	0.3	1.5
NON-GOVT	452.7	488.8	515.8	8.0	5.5	13.9
TOTAL	1,804.4	1855.8	1887.3	2.8	1.7	4.6
SECONDARY						
GOVT	882.4	863.0	867.7	-2.2	0.5	-1.7
NON-GOVT	412.2	452.8	495.1	9.8	9.3	20.1
TOTAL	1294.6	1315.8	1362.7	1.6	3.6	5.3
ALL SCHOOLS						
GOVT	2234.1	2230.1	2239.2	-0.2	0.4	0.2
NON-GOVT	864.9	941.5	1010.9	8.9	7.4	16.9
TOTAL	3099.0	3171.6	3250.0	2.3	2.5	4.9

Note: These projections are based solely on population estimates and continuing 1996-97 grade progression ratios.
Source: DEETYA, Schools Division

Based on projections prepared by DEETYA, growth in primary school enrolments for all sectors is expected to slow from 2.8 per cent in the five years to 1997 to 1.7 per cent in the five years to 2002.

- Government primary school enrolments are projected to rise only marginally (0.3 per cent), with almost all of the growth in the non-government sector (5.5%), a continuation of the trend evident in recent years.

Stronger growth is expected for secondary school enrolments with a more than doubling from 1.6 per cent in the five years to 1997, to 3.6 per cent in the five years to 2002. This demographic trend will add to the demand for secondary school teachers and potentially exacerbate recruitment difficulties in some specialisations, especially if retention rates to years 10, 11 and 12 also increase.

- Over the five years to 1997 student enrolments in government secondary schools fell by 2.2 per cent due to falling retention rates to school years 10, 11 and 12. Retention rates are assumed to level out and, consequently, this demand trend is expected to be reversed with growth of 0.5 per cent projected in the five years to 2002; and
- Strong growth in secondary school enrolments in the non-government sector (9.8 per cent between 1992 and 1997) is projected to continue (9.3 per cent in the five years to 2002).

In summary, DEETYA's enrolment projections indicate that the main aspects of teacher demand will be the shift of growth from the primary to secondary age groups, and continued strong growth in non-government school student numbers for both primary and secondary.

Sensitivity: Student Enrolments

A. *Primary* enrolments are determined by demographic trends (natural increase and migration) and are unlikely to vary much from the projections, especially in view of recent falls in the family reunion component of the migration intake; and

B. *Secondary* enrolments similarly can be expected to be close to the projected levels, although retention rate variations add some uncertainty.

Student/Teacher Ratios

The full-time student to teacher (full-time equivalent units) ratios for *primary schools in total* decreased from 18.4 in 1992 to 17.9 in 1997. The fall was apparent in all sectors of the primary school system, although the decline was smallest in the government sector (down by 0.4 to 17.6) and more marked in non-government schools:

- by sector: Anglican schools down by 0.5 to 15.0; Catholic down by 1.0 to 20.0; and Other non-government down by 1.0 to 16.3.

The full-time student to teacher (full-time equivalent units) ratios for *secondary schools in total* increased from 12.4 in 1992 to 12.7 in 1997. The decrease in the ratio for non-government schools (down by 0.3 to 12.8) was more than offset by a rise in the ratio in the government sector from 12.1 in 1992 to 12.7 in 1997 (see Table 3).

- The decline for non-government schools varied: down 0.6 to 11.6 for Anglican schools; down 0.3 to 13.7 for Catholic schools and down 0.3 to 11.6 for other non-government.

Student to teacher ratios are an important determinant of teacher demand, as relatively small changes in the student to teacher ratio can impact considerably on teacher demand. This ratio may change in two ways: firstly, the ratio for one or more of the sectors could decline; and secondly, student enrolments could shift towards sectors with lower student to teacher ratios, particularly the Anglican and other non-government sectors.

Sensitivity: Student to Teacher Ratio

A. *Primary school*: if the overall student to teacher ratio fell by 0.5 to 17.4, over the five years to 2002, primary teacher demand would be *around 2.9 per cent higher* than if the ratio remained unchanged (the ratio fell by this amount in the five years to 1997); and

B. *Secondary school*: a fall in the student to teacher ratio of 0.5 to 12.2 would *increase secondary teacher demand by around 4.1 per cent.* Such a reduction would be counter to the recent trend of a 0.3 rise over the five years to 1997 (a fall of 0.3, a reversal of the recent trend, would result in a 2.4 per cent rise in secondary teacher demand).

TABLE 3: PRIMARY & SECONDARY SCHOOLS: FULL-TIME STUDENT TO TEACHER RATIOS (FULL-TIME EQUIVALENT UNITS), CATEGORY OF SCHOOL, 1992 TO 1997

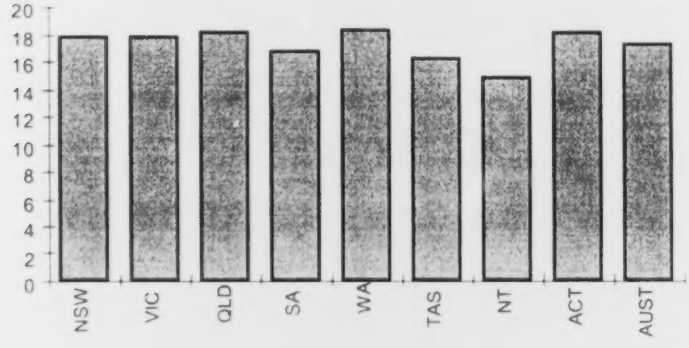
School Type	1992	1993	1994	1995	1996	1997	Change 1992-1997
Primary Schools							
Government	18.0	18.1	18.3	17.9	17.8	17.6	-0.4
Anglican	15.5	15.2	14.9	14.8	14.8	15.0	-0.5
Catholic	21.0	20.7	20.3	20.1	20.0	20.0	-1.0
Other non-government	17.3	17.0	16.8	16.6	16.5	16.3	-1.0
Total non-government	19.8	19.5	19.1	18.9	18.8	18.7	-1.1
All primary schools	**18.4**	**18.4**	**18.5**	**18.1**	**18.1**	**17.9**	**-0.5**
Secondary Schools							
Government	12.1	12.1	12.4	12.5	12.7	12.7	0.6
Anglican	12.2	12.1	12.0	11.7	11.8	11.6	-0.6
Catholic	14.0	13.8	13.7	13.6	13.7	13.7	-0.3
Other non-government	11.8	11.7	11.6	11.6	11.6	11.6	-0.2
Total non-government	13.1	13.0	12.9	12.8	12.8	12.8	-0.3
All secondary schools	**12.4**	**12.4**	**12.6**	**12.6**	**12.7**	**12.7**	**0.3**

Source: ABS, *Schools, Australia*, 1992-1997 (Tables 18, 21 or 55)

Student/Teacher Ratios - Government Sector

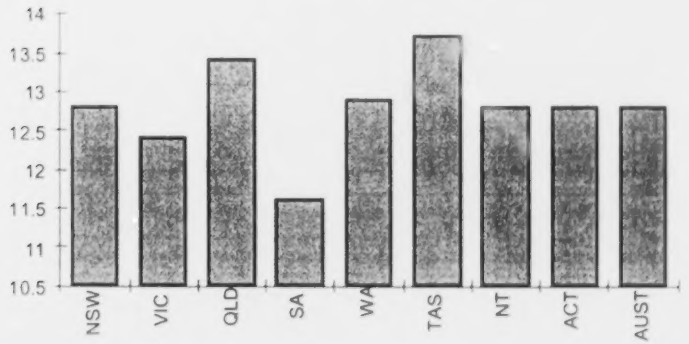
In 1997, the primary student to teacher ratio in the government sector ranged from 14.8 in Northern Territory and 16.2 in Tasmania to the highest of 18.4 in Western Australia (see Figure 3). Very little change in these ratios is expected over the next few years.

FIGURE 3: PRIMARY STUDENT TO TEACHER RATIOS BY STATE/TERRITORY - GOVERNMENT SECTOR 1997 (FTE)



In 1997, the secondary student to teacher ratio in the government sector ranged from 11.6 in South Australia and 12.4 in Victoria to 13.4 in Queensland and even higher at 13.7 in Tasmania (see Figure 4).

FIGURE 4: SECONDARY STUDENT TO TEACHER RATIOS BY STATE/TERRITORY - GOVERNMENT SECTOR 1997 (FTE)



As noted earlier, the student/teacher ratio is a key factor in determining the demand for teachers and government schools have a dominant role in the overall ratio. Very little change is expected in the ratio in government secondary schools over the next few years, with the ratio for Australia remaining close to 12.7. There are some different trends at the State/Territory level, although not sufficient to impact markedly on teacher demand.

Employment Trends and Prospects - Government Sector

Information provided by State and Territory education authorities on teachers employed (full-time equivalent) is presented in Tables 4 (primary) and 5 (secondary). More detailed data are presented in Appendix C.

The number of *primary school teachers* employed in the government sector was around 76,700 in 1997 and employment is expected to grow slightly to 78,000 in 2001 (a rise of 1.7 per cent between 1997 and 2001 is projected).

TABLE 4: PRIMARY - TEACHERS EMPLOYED (FTE) 1997 TO 2001

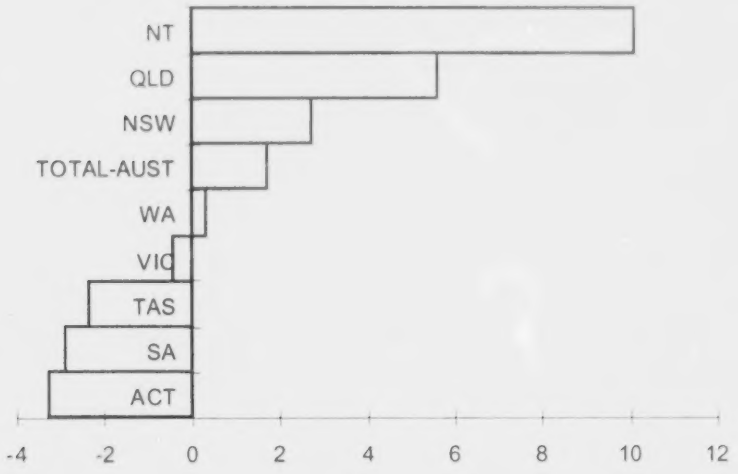
State/Territory	1997	1998	2001	Change 1997 to 2001 (1)	
	'000	'000	'000	'000	%
New South Wales	25.3	25.5	25.9	0.7	2.7
Victoria	17.0	16.9	16.9	-0.1	-0.4
Queensland	14.6	14.9	15.5	0.8	5.6
South Australia	7.1	7.0	6.9	-0.2	-2.9
Western Australia	7.9	7.9	7.9	0.0	0.3
Tasmania	2.4	2.4	2.4	-0.1	-2.3
Northern Territory	1.3	1.4	1.5	0.1	10.1
ACT	1.2	1.2	1.2	0.0	-3.3
AUSTRALIA	76.7	77.1	78.0	1.3	1.7

(1) Changes based on unrounded figures.

The strongest growth in primary teacher employment (see Figure 5) is expected in the Northern Territory (10.1 per cent), Queensland (5.6 per cent) and New South Wales (2.7 per cent). Western Australia expects slight growth of 0.3 per cent, while the remaining States and the ACT are projecting a decline in primary teacher employment in the government sector.

- The strongest falls are projected for the ACT (3.3 per cent); and South Australia (2.9 per cent).

FIGURE 5: PROJECTED GROWTH IN PRIMARY TEACHER EMPLOYMENT - GOVERNMENT - BY STATE/TERRITORY - 1997 TO 2001 (%)



The number of *secondary school teachers* employed in the government sector was around 68,200 in 1997 and is expected to increase to 68,500 in 1998. The number of teachers in 2001 is expected to be at a similar level to 1998 (a rise of 0.6 per cent between 1997 and 2001 is projected).

- The strongest growth is expected in the Northern Territory (6.7%), Western Australia (2.7%), Queensland (1.5%) and South Australia (1.4%).

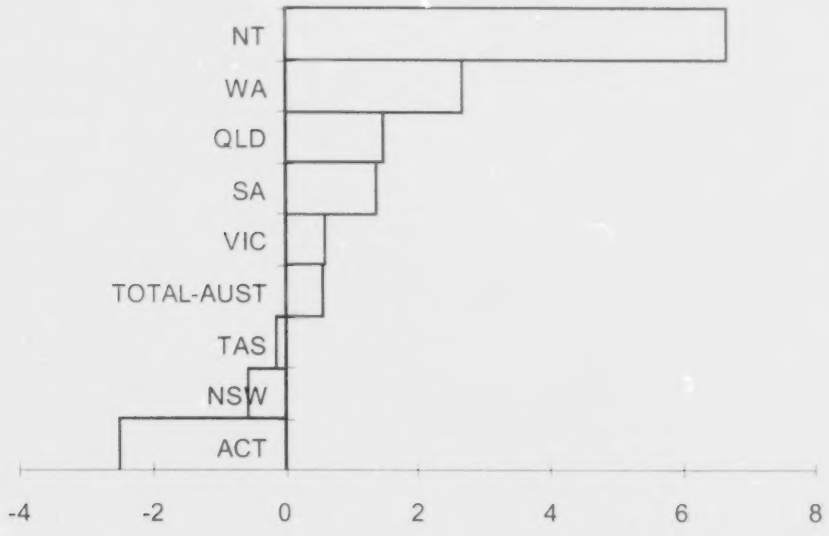
- The strongest fall is projected for the ACT (2.5 per cent).

TABLE 5: SECONDARY - TEACHERS EMPLOYED (FTE) 1997 TO 2001

State/Territory	1997	1998	2001	Change 1997 to 2001(1)	
	'000	'000	'000	'000	%
New South Wales	24.2	24.4	24.0	-0.1	-0.6
Victoria	17.2	17.0	17.3	0.1	0.6
Queensland	11.2	11.3	11.4	0.2	1.5
South Australia	5.2	5.3	5.3	0.1	1.4
Western Australia	6.3	6.3	6.4	0.2	2.7
Tasmania	2.2	2.1	2.2	0.0	-0.1
Northern Territory	0.6	0.6	0.6	0.0	6.7
ACT	1.4	1.4	1.3	0.0	-2.5
AUSTRALIA	68.2	68.5	68.5	0.4	0.6

(1) Changes based on unrounded figures.

FIGURE 6: PROJECTED GROWTH IN SECONDARY TEACHER EMPLOYMENT - GOVERNMENT - BY STATE/TERRITORY - 1997 TO 2001 (%)



Permanent/fixed term

According to State/Territory education authorities the vast majority of teachers in government schools (some 91 per cent of both primary and secondary teachers, on average) are employed on a permanent/ongoing basis, with 9 per cent of primary and 8 per cent of secondary teachers on average, employed fixed term. The proportions employed on a permanent or on a fixed term basis vary by State and Territory (more detailed data are presented in Appendix C):

- The proportion of primary teachers working fixed term is higher in Western Australia (20 per cent), the Northern Territory (19 per cent) and Tasmania (17 per cent); and
- Western Australia (24 per cent) and Tasmania (21 per cent) also had relatively high proportions of secondary teachers working fixed term.

Impact of Overseas Demand

From time to time overseas education authorities run campaigns to attract Australian teachers to their countries. Recently the Hong Kong education department has sought to recruit teachers of English, as have authorities in Singapore, Taiwan and Japan. There is also some recruitment activity encouraging teachers to move to England, New Zealand and Papua New Guinea. Some of this recruitment activity appears to be targeted towards particular States.

At this stage the level of overseas recruitment has not significantly impacted upon local supply. However, if potential shortages in the United Kingdom, New Zealand and the United States were to result in large scale recruitment campaigns in Australia, any local recruitment difficulties could worsen. Nevertheless, in many instances teachers leaving Australia to work overseas do not settle permanently in another country and ultimately return to Australia.

United States

The employment outlook for teachers in the United States varies among States and school districts. Some central cities and rural areas have difficulty attracting enough teachers. Teachers in some subjects, particularly mathematics and science (especially chemistry and physics), seem to be in short supply. Areas that seem to be experiencing an oversupply of teachers include general elementary education, physical education and social studies.

Overall employment of elementary and secondary school teachers is expected to increase faster than the average for all occupations through the year 2005. Job openings for all teachers are expected to increase substantially between now and the year 2010 as the large number of teachers now in their forties reach retirement age.

The number of teachers employed is also dependent on State and local expenditure for education. The supply of teachers is expected to increase in response to reports of improved job prospects, more teacher involvement in school policy and greater public interest in education.

- The passing of a law in California on class size reduction has dramatically increased the demand for teachers in that State. In 1996-97, 18,400 teachers were hired specifically for class size reduction (resulting in a 115% increase in the demand for new teachers).

Sources: 1. Internet, Briefing Paper prepared by the National Commission on Teaching and Americas Future, Linda Darling-Hammond, Director of the Commission & Professor at the Teachers College Columbia University, 1996.

2. 'Occupational Outlook Handbook', US Department of Labor, January 1996.

Canada

In the early 1980s, funding for education decreased in Canada while the size of the school aged population stabilised. New teacher positions in elementary and secondary schools were declining as the mobility in the existing teacher workforce fell as teachers chose to remain in secure positions rather than take leave or seek other employment alternatives. This situation led to considerable concern that too many new teachers were being trained for too few positions, a situation resulting in enrolment quotas designed to limit entrants into the teaching professions.

However, by the end of the 1980's, elementary school enrolments once more began to grow. The need for more teachers to accommodate larger enrolments was compounded by the fact that the large contingent of teachers hired during the 1960's was reaching retirement age.

Recently, there appears to be a shortage of teachers in isolated areas, although this may be offset by surpluses in urban centres. Part-time work is expected to be a major source of employment growth. The overall outlook for teachers is, nevertheless, expected to remain stable.

Sources: 1. 'The Employment Experience of recent Graduate Education Students Education Students', Anne Marie Decore, The Canadian Journal of Higher Education, Vol. XXII-1, 1992.

2. 'Canadian Job Futures', published by the Canadian Occupational Projection System (COPS) of the Applied Research Branch and the Occupational and Career Development Division of Human Resources Development Canada (HRDC), 1996.

United Kingdom

The British Government has promised that, by September 2001, no five, six or seven year old will be in a class of more than 30 children. This policy will increase the demand for teachers. In February 1998, the Department of Education and Employment released 22 million pounds to hire additional teachers. This will be directed at taking more than 100,000 pupils out of classes of more than 30 pupils.

Training targets specifying the number of students to be undergoing Initial Teacher Training (ITT) are set by the Department of Employment and Education. Based on an ageing teacher population and an increase in the number of pupils in coming years, there has been a substantial increase in training targets over the next five years. However, ITT courses have been consistently under subscribed since 1984.

- Maths and physics courses are persistently the most difficult to fill. Shortages of maths and science teachers have been a consistent feature of the United Kingdom school system for a number of years.

In certain areas such as London and the South East, there is much greater difficulty attracting applicants for teaching posts due to the high cost of living. Schools in these areas have tried a variety of measures (usually financial incentives) to attract applicants.

Perhaps as a result of possible teacher shortages, the government has established alternative routes into the teaching profession. These include the Licensed Teachers Scheme and school centred training. There have also been some moves to make it easier for schools to employ foreign trained teachers. The developments in the United Kingdom and, to a lesser extent, the emerging situation in parts of the United States, could have some impact on the demand for teachers in Australia.

Sources: *1. 'Imaginative Projects: Arguments for a New Teacher Education', Ian Hextall, Martin Lawn, Ian Menter, Susan Sidwick and Stephen Walker, Evaluation and Research in Education, Vol. 5, Nos 1&2, 1991.*

2. 'Teacher Supply in the 1990's: an Analysis of Current Developments', Evaluation and Research in Education, Neil Straker, Vol. 5, Nos 1&2,1991.

3. Internet; Press Releases from relevant British Ministers and the December 1998 Parliamentary Office of Science and Technology Technical Report 88.

PART B: SUPPLY OF TEACHERS

Supply Summary

Employment of primary and secondary school teachers has been fairly stable in recent years, although there is a sizeable number of persons qualified as school teachers who are employed in other occupations, unemployed or not in the labour force. The number of graduates *completing* suitable higher education courses has fluctuated in the 1990s, with a declining trend evident. *Commencements* of *Initial* Primary and Secondary School Higher Education courses show only a slight downward trend in recent years (1993 to 1996), indicating that the decline in completions may ease. Employment outcomes for education graduates have improved since the early 1990s, suggesting some tightening in the teacher labour market.

While in recent years there is evidence of a decline in the relative salaries for *primary* school teachers, this trend is not evident for relative salaries for *secondary* school teachers. Net migration of primary and secondary school teachers appears to have peaked in the early 1990s and is now a relatively small element of supply.

Wastage, particularly that associated with retirement, has a major impact on supply and is likely to increase in importance in the longer term in view of the relatively high proportion of employed secondary teachers aged 35 to 54 years and evidence of early retirements from the profession.

Introduction

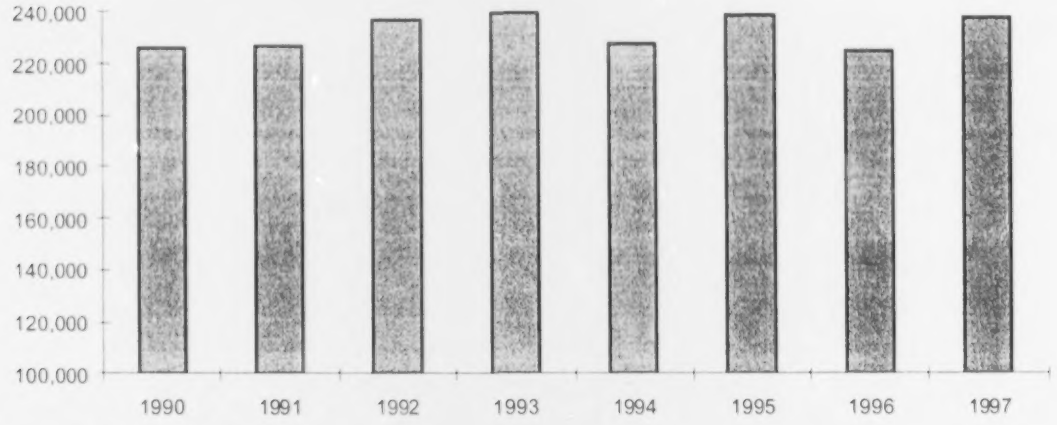
The supply of primary and secondary school teachers can be considered to comprise those teachers employed in the occupation and those suitably qualified who are unemployed and seeking work as primary or secondary school teachers. Further sources of supply consist of teachers in training; those who are qualified as primary and/or secondary school teachers but who are employed in other occupations or are not involved in the labour market (***wastage*** from the occupation); and suitably qualified migrants. From looking at these factors it is evident that increased retirements and/or a decline in specialised teacher training would act as a constraint on teacher supply.

Employment

The combined employment of primary and secondary school teachers (including casual teachers) has remained fairly steady during the 1990s, according to estimates from the Australian Bureau of Statistics (ABS) Labour Force Survey, averaging 226,000 to 239,000 (see Figure 7). The 1997 average of 238,000 was only slightly below the recent peak of 239,000 in 1993. In 1990 the combined employment of primary and secondary school teachers represented 2.9 per cent of total employment.

- The proportion fell marginally to 2.8 per cent of total employment in 1997, with a peak of 3.1 per cent being recorded in both 1992 and 1993.

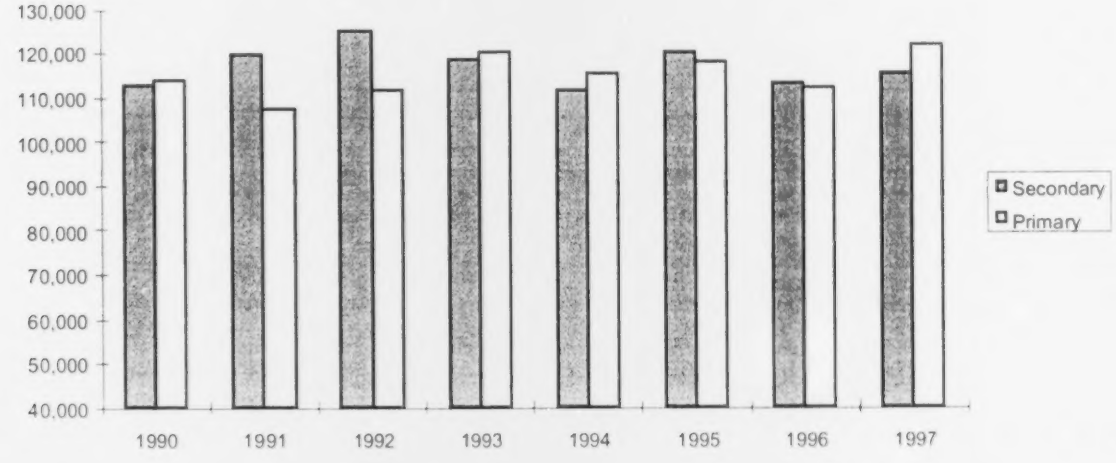
FIGURE 7: AVERAGE ANNUAL COMBINED EMPLOYMENT OF PRIMARY AND SECONDARY SCHOOL TEACHERS 1990 TO 1997 (NO.)



Source: ABS, *Labour Force Survey* (microfiche)

ABS employment estimates suggest that in much of the 1990s there were about equal numbers of primary and secondary school teachers employed, with employed primary school teachers slightly exceeding employed secondary school teachers in four of the last eight years (see Figure 8).

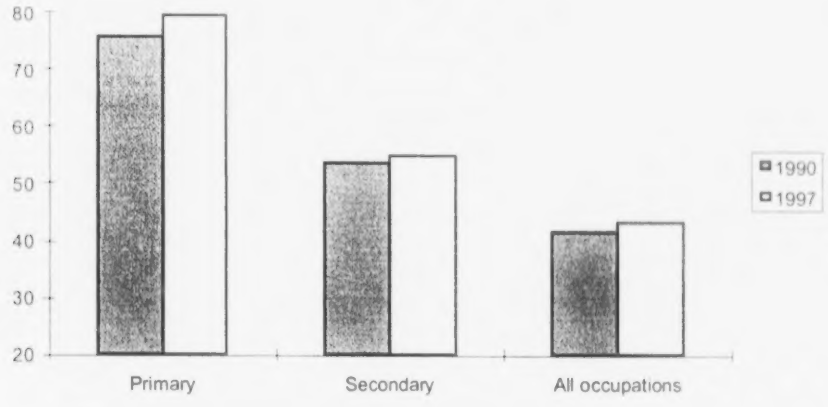
FIGURE 8: AVERAGE ANNUAL EMPLOYMENT OF PRIMARY AND SECONDARY SCHOOL TEACHERS 1990 TO 1997 (NO.)



Source: ABS, *Labour Force Survey* (microfiche)

Almost 80 per cent of employed primary school teachers and 55 per cent of secondary school teachers were females in 1997 (annual average figures). This is well above the proportion females represent of total employment (43 per cent in 1997). The female share of primary school teachers has increased by almost four percentage points since 1990; compared with a rise of just over one percentage point for secondary school teachers; and two percentage points for total employment (see Figure 9).

FIGURE 9: FEMALE SHARE OF BOTH PRIMARY AND SECONDARY SCHOOL TEACHER EMPLOYMENT AND OF ALL EMPLOYMENT 1990 & 1997 (%)



Source: ABS, *Labour Force Survey* (microfiche and disk)

Training

Completions of Initial Primary School Higher Education courses have tended to fall during the 1990s from over 5,000 to around 3,000 per year. The number of students completing Initial Primary School Higher Education courses was 41.1 per cent lower in 1996 than in 1989.

A similar situation is apparent for Initial Secondary School Teacher course completions, although the rate of decline has been lower. Completions of Initial Secondary School Higher Education courses generally have fluctuated in the 4,000 to 5,000 range during the 1990s, albeit with some downward trend evident. The number of students completing Initial Secondary School Higher Education courses was 20.6 per cent lower in 1996 than in 1989.

While these courses are normally undertaken by those seeking a career as school teachers, some primary and secondary school teachers complete courses classified (at times) by some universities as Initial School Teacher Education - General and some primary school teachers complete Initial Early Childhood Teacher Education courses. Trends in completions of relevant courses are provided in Figure 10 and Table 6, with the combined trend in Figure 11. State and Territory data are presented in Appendix D.

FIGURE 10: PRIMARY, SECONDARY, EARLY CHILDHOOD AND INITIAL - GENERAL SCHOOL TEACHER COMPLETIONS - 1989 TO 1996 (NO.)

Source: DEETYA, *Higher Education Student Data Collection*

TABLE 6: PRIMARY AND SECONDARY SCHOOLS TEACHER COMPLETIONS, 1989 TO 1996 (NO.)

	1989	1990	1991	1992	1993	1994	1995	1996
Initial Primary Teacher Education	5,317	5,216	5,483	5,052	5,000	4,059	3,710	3,130
Initial Secondary Teacher Education	5,111	4,615	4,570	4,269	4,793	4,331	4,427	4,060
Initial School Teacher Education - general	569	627	994	1,086	749	704	490	701
Initial Early Childhood Teacher Education	899	1,074	1,132	1,163	1,106	1,070	952	1,020
TOTAL	11,896	11,532	12,179	11,570	11,648	10,164	9,579	8,911

Source: DEETYA, *Higher Education Student Data Collection*

FIGURE 11: COMBINED INITIAL SCHOOL TEACHER COMPLETIONS - 1989 TO 1996 (NO.)

Source: DEETYA, *Higher Education Student Data Collection*

Commencements of Initial Primary and Initial Secondary School Higher Education courses show a slight downward trend in recent years (to 1996), suggesting only a marginal fall in completions in these courses in coming years (provided that wastage *during* training does not increase significantly). The number of students commencing Initial Primary School Higher Education courses was 2.8 per cent lower in 1996 than in 1993 and the number of students commencing Initial Secondary School Higher Education courses was 4.0 per cent lower over the same years. Commencements in Initial School Teacher Education - General courses continued to be volatile (declining by 10.3 per cent over the three years to 1996). On the other hand, the number of students commencing Initial Early Childhood Education courses rose by 39.0 per cent between 1993 and 1996 (see Figure 12 and Table 7 for individual course commencement trends and Figure 13 for the combined trend. State and Territory data is presented in Appendix D).

FIGURE 12: PRIMARY, SECONDARY, EARLY CHILDHOOD AND INITIAL - GENERAL SCHOOL TEACHER COMMENCEMENTS - 1990 TO 1996 (NO.)

Source: DEETYA, *Higher Education Student Data Collection*

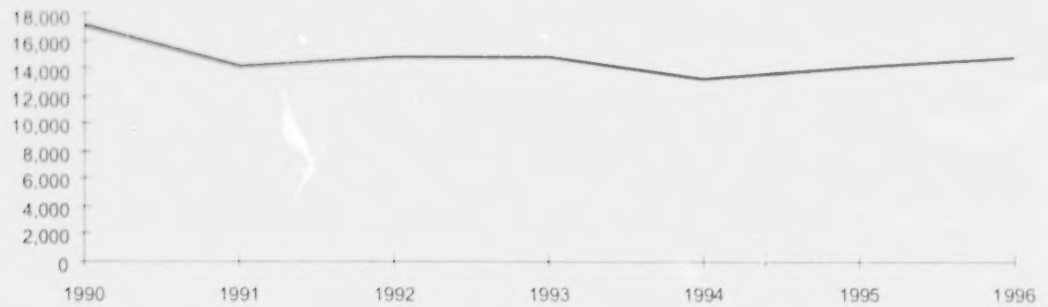
TABLE 7: PRIMARY & SECONDARY SCHOOLS TEACHER COMMENCEMENTS, 1990 TO 1997 (NO.)

	1990	1991	1992	1993	1994	1995	1996	1997 [a]
Initial Primary Teacher Education	7,983	4,967	5,466	5,589	4,955	5,580	5,431	5,912
Initial Secondary Teacher Education	6,518	5,674	6,185	6,173	5,750	5,831	5,926	6,896
Initial School Teacher Education - general	940	1,780	1,476	1,488	902	541	1,334	1,772
Initial Early Childhood Teacher Education	1,684	1,720	1,668	1,581	1,748	2,198	2,197	2,142
TOTAL	17,125	14,141	14,795	14,831	13,355	14,150	14,888	16,722

[a] Data for 1997 were compiled in a different way to data for prior years. The 1997 data take into account the coding of Combined Courses to two fields of study. As a consequence, the total for some fields of study show larger increases than would be the case if data for only one field were to be counted.

Source: DEETYA, *Higher Education Student Data Collection*

FIGURE 13: COMBINED INITIAL SCHOOL TEACHER COMMENCEMENTS - 1990 TO 1996 (NO.)



Source: DEETYA, *Higher Education Student Data Collection*

Student commencements in all of these courses recorded rises in 1997 but these increases may partly reflect a change in the manner of compilation of statistics. In 1997, for the first time, the method of compilation took into account the coding of combined courses in two fields of study. This has tended to show larger increases in some fields of study than would be the case if data for only one field were counted.

- The Higher Education database statistics may vary from that obtained from individual universities, presumably due to coding or reporting differences.

In New South Wales and Victoria, at least, education authorities have reported that there is a shift from undergraduate to one and, increasingly, two year post-graduate courses for teacher training. The increased usage of post-graduate courses should allow supply to respond more quickly to changes in demand, especially emerging shortages. This would require graduates completing other fields of study to choose to become school teachers.

Unemployment

Precise and timely figures on the number of unemployed primary or secondary school teachers are not readily available. The 1996 Census did not collect information on the occupation of last job. The following information suggests that there is a sizeable pool of unemployed teachers.

Unemployment estimates from the ABS Labour Force Survey are provided for those who had worked full-time as school teachers for two weeks or more in the two years prior to the survey. Estimates of unemployed school teachers from this survey are subject to high sampling variability and hence trends are difficult to assess, although (as would be expected) it appears that the number of school teachers unemployed is highest at the beginning of the year (February).

- The opportunity for teachers who did not secure ongoing employment to teach on a casual basis is probably a factor in this apparent seasonal trend (a person who worked for one hour or more for pay is treated as employed in the Labour Force survey).

The Survey indicates that an average of about 3,000 primary and secondary school teachers (combined) were unemployed over the four quarters to November 1997 (although the estimate is subject to relatively high sampling variability). This represents an average unemployment rate of approximately 1.2 per cent, somewhat below the rate for professional occupations as a group (1.9 per cent).

Pool of Available Teachers

Although the unemployment rate for teachers is quite low, many qualified teachers may be available for employment as teachers even though not unemployed at the time of the survey. For example, the ABS Survey of Job Search Experience of Unemployed Persons estimated that in July 1996 there were some 14,600 unemployed persons with post-school qualifications in education, and 75 per cent of these were females. While most of these unemployed persons would be school teachers, the estimate would also include TAFE and university teachers.

According to the survey the main difficulties in finding work were, in rank order, 'other difficulties' (which included too far to travel, difficulties with child care and other family responsibilities), 'too many applicants', and 'no vacancies at all'. Comparable data are not available from the 1997 survey as information on main field of study was not collected in that year (this information may be collected again in 1998).

Information is available in some States/Territories on the pool of qualified teachers who may be available for teaching positions. The *NSW Department of Education and Training* list of teachers seeking employment grew from 6,000 in 1992 to 15,500 in late 1997. About 45 per cent (or some 7,000) of those on the waiting list were secondary school teachers with the largest group being English and history teachers. A further 8,500 on the waiting list were primary school teachers.

However, not all those on the waiting list would be available or suitable for vacancies that may arise and some would be employed in other occupations.

There is also a pool of teachers available for employment as primary or secondary school teachers in other States. According to an Education Queensland *Teacher Supply and Demand in Queensland to the Year 2006* report, there is a pool of some 5,000 registered teachers or graduates of former years, seeking admission or re-admission to the teaching workforce. The South Australian Department of Education, Training and Employment currently has about 3,300 applications from teachers available for permanent or contract work and states that this figure has been stable over the past few years.

The Tasmanian Department of Education, Training, Community and Cultural Development (DETCCD) maintains a register of people interested in employment as teachers. At March 1998 the register listed 784 people for primary teaching and 781 for secondary teaching. The DETCCD advise that between 800 and 1,000 people work for the Department as teachers on a temporary basis at any one time, leaving around 600 to 800 people available for work.

Graduate Employment Outcomes

Unpublished data from the Graduate Destination Survey (GDS) conducted by the Graduate Careers Council of Australia (GCCA) reveal that a significant proportion of Australian residents completing initial secondary teacher education courses and seeking full-time work had not found suitable (full-time) work at the time of the surveys (approximately four months after completing studies).

Unpublished 1997 GDS results indicate that 4 per cent of those graduating from entry bachelor and undergraduate diploma courses in initial ***primary*** teacher education and seeking full-time work had not found any work at the time of the survey. Importantly, a further 21 per cent had found only part-time work, although seeking full-time employment.

Unpublished 1997 GDS results also indicate that 4 per cent of those graduating from entry bachelor and undergraduate diploma courses in initial ***secondary*** teacher education and seeking full-time work had not found any work at the time of the survey. A further 14 per cent had found only part-time work.

GCCA's GDS trend data provide evidence of a recent tightening in the labour market for teaching occupations from the recession of the early 1990s to 1996, but not to the extent of 1988 to 1990. The labour market appeared to ease slightly by the 1997 GDS (with the majority of responses relating to April 1997). The trend for teaching broadly conforms to the pattern for all graduates, although since 1992 the improvement in the labour market for teaching graduates has been stronger than for all graduates (see Table 8).

TABLE 8: BACHELOR DEGREE GRADUATES WORKING FULL-TIME AS A PROPORTION OF THOSE AVAILABLE FOR FULL-TIME WORK IN EDUCATION FIELDS OF STUDY, 1988 TO 1997

Field of Study	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Initial Ed	83.4	87.5	82.4	66.6	58.5	63.3	63.1	74.6	78.8	78.7
All Graduates	88.6	91.3	87.8	78.6	70.6	71.7	74.5	78.9	80.6	79.2

Source: GCCA, *Graduate Destination Survey 1996 Report* and *GradStats 2, December 1997*

Immigration to Australia

Precise data on immigration (that is, net migration) of primary and secondary school teachers are not available. However, estimates can be derived by comparing departures of all teachers with arrivals of primary and secondary school teachers. These estimates indicate that immigration of primary and secondary school teachers has provided a declining contribution to supply, with primary school teachers decreasing by 29 per cent from 350 in 1990-91 to 250 in 1996-97.

- Over the same period, immigration of secondary school teachers fell by 62 per cent from 1,070 to 410. Estimated immigration peaked in 1991-92 and reached its recent low point in 1993-94 (see Table 9).

TABLE 9: ESTIMATED IMMIGRATION OF SECONDARY SCHOOL TEACHERS TO AUSTRALIA, 1990-91 TO 1996-97

	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Number of:							
Primary School Teachers immigrants	350	400	280	170	290	340	250
Secondary School Teachers immigrants	1070	1680	900	310	530	560	410

Source: DIMA, unpublished migration statistics

From 1991 to 1993 a Labour Agreement for Migration existed between the New South Wales Government (Department of School Education) and the Commonwealth for a two year ceiling of 135 permanent migrants and 40 temporary entrants (with an option to change status to permanent migrant after 2 years), covering secondary mathematics and science teachers and special education teachers.

Interstate Mobility

Interstate mobility of teachers is quite low and does not appear to be a significant factor in the overall supply of primary or secondary school teachers for individual States. Nevertheless, interstate mobility is an important aspect of the supply of teachers in the Territories, particularly the Northern Territory. The ABS Survey of Labour Mobility estimates that for those employed in the education industry, over the year to February 1996 only about 1 per cent changed State of usual residence.

- Census data for 1996 indicate the importance of interstate supply for the Northern Territory (see Table 10).

TABLE 10: INTERSTATE MOVEMENT BETWEEN 1991 AND 1996 OF EMPLOYED TEACHERS AS PROPORTION OF EMPLOYED TEACHERS IN EACH STATE AND TERRITORY (%)

Movement	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
To State								
- Primary Teachers	2.7	1.6	4.7	2.2	2.4	4.8	35.7	15.4
- Secondary Teachers	2.6	1.6	5.6	2.6	3.1	5.4	51.6	17.9
From State								
- Primary Teachers	2.6	3.2	2.5	4.0	2.2	5.0	21.8	17.8
- Secondary Teachers	2.5	3.4	2.8	5.8	2.3	4.9	26.0	17.1

Source: ABS, *Census of Population and Housing*, 1996

Wastage

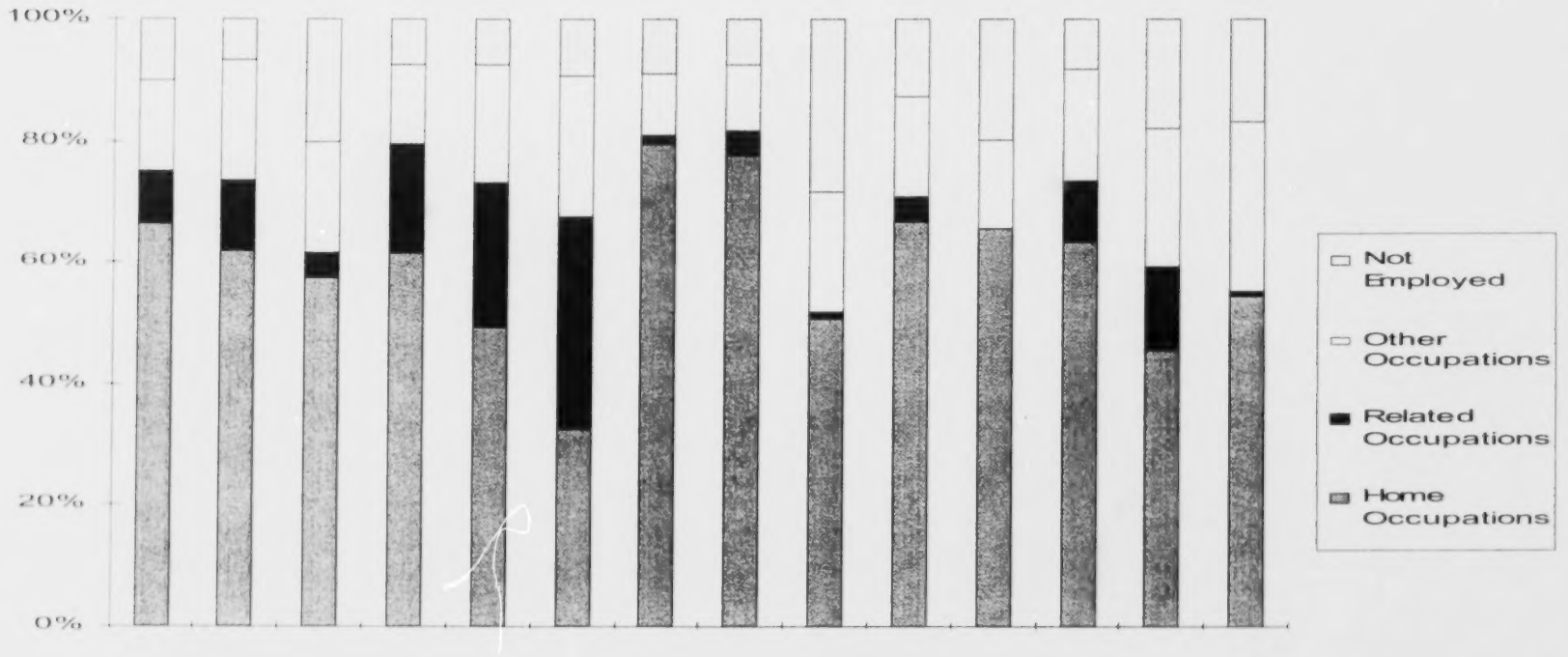
Currently available 1996 Census data indicate that 69 per cent of employed persons with formal qualifications in *primary teaching* were working in teaching jobs (as primary school teachers, principals or other types of school teacher). A similar proportion (70 per cent) of those employed with formal qualifications in secondary teaching were working as secondary school teachers or in related teaching occupations.

- The 30 per cent who were qualified and working *outside school teaching* were employed across a broad range of occupations.

More detailed information is provided in a study conducted by the (then) Department of Employment, Education and Training based on 1986 Census data. This study indicates that separation rates from teaching were neither particularly high or low compared with other professional and para-professional occupations (see Figure 14). This was also indicated in a previous study using 1981 Census data.

The 1986 Census data revealed that 18 per cent of those holding qualifications in education and of working age (15 to 64 years) were working in unrelated occupations, including farmer and farm manager, accounting clerk and office secretary and stenographer. A further 20 per cent were not employed (unemployed, retired or not participating in the labour force for family or other reasons), a similar proportion to physiotherapy and less than nursing (28 per cent) - see Figure 14. There will be an opportunity to update this analysis once the full range of relevant 1996 Census data become available.

FIGURE 14: PERSONS AGED 15-64 HOLDING PROFESSIONAL AND PARA-PROFESSIONAL QUALIFICATIONS IN SELECTED FIELDS - PROPORTION IN HOME OCCUPATIONS*, RELATED OCCUPATIONS, OTHER OCCUPATIONS AND NOT EMPLOYED, AUSTRALIA, 1986



Note: ***Home occupation*** is the occupation most appropriate to a specific qualification.

Source: DEET, *Separation from Skilled Occupations*, 1989

Graduate destinations

An insight into the occupational destination of education graduates can be gained from the GCCA's published 1997 Graduate Destination Survey (GDS) report. This indicates that a significant proportion of Education graduates wanting work do not find employment in teaching occupations within four months of graduating. The GDS reveals that in 1997 around 20 per cent of bachelor degree graduates who gained employment were working in occupations outside teaching, key areas being management/administration occupations, clerical/sales and business professionals.

Unpublished data from the 1997 GDS indicate that 87 per cent of those graduating from entry bachelor and undergraduate diploma courses in initial ***primary*** teacher education and gaining full-time work were employed by schools. A slightly lower proportion (83 per cent) of those graduating from entry bachelor and undergraduate diploma courses in initial ***secondary*** teacher education were employed by schools.

Job Mobility

The *ABS Labour Mobility* Survey provides information on job changes, both into and out of industries. The latest survey revealed that of those employed in the education industry in February 1996, 90 per cent had been employed in that industry in February 1995, while 6 per cent were not working in February 1995. The remaining *4 per cent moved into education from other industries*, the most important being the retail trade.

Exits from the education industry presented almost a mirror image. An estimated 4 per cent of those employed in the education industry changed industry of employment in the year to February 1996: 89 per cent remained in the education industry, 2 per cent were looking for work and 5 per cent were not in the labour force. Those changing industry of employment entered a wide variety of industries.

The *ABS Job Search Experience of Unemployed Persons* sheds some light on the reasons for ceasing full-time jobs. For those unemployed, who were employees in their last full-time job in the education industry and who ceased that job in the two years to July 1997, the most important reason given for cessation was *that the job was temporary or seasonal* (was not a long-term position).

Reasons for separations - government

Wastage rates from government school teaching appear to be generally of the order of 1 - 5 per cent, with primary school teachers having a slightly lower wastage rate than secondary school teachers. The wastage rates are in the lower end of the range in New South Wales, Victoria and Western Australia, while Queensland and the Northern Territory have the highest wastage rate.

The wastage rate for primary school teachers in Queensland was estimated at 4.8 per cent in 1997, while the secondary school teachers wastage rate appears to be much higher at around 8 to 10 per cent, at least in the government sector. In the Northern Territory the wastage rate from all government schools is about 8.5 per cent.

Education authorities have provided information on reasons for separation, although the information provided is incomplete and the coverage varies considerably between States/Territories. While it is

not possible to show a full comparison, some State/Territory comments for primary and secondary teachers are illustrative.

Primary

In New South Wales there were approximately 670 separations in 1997 and about 725 are expected in 1998, and of these approximately 340 retired, 245 resigned and around to 90 received a medical retirement. In Victoria, there were around 1,730 separations in 1997 (1,725 are expected in 1998):

- Non renewal of fixed term contract was the main reason for separation in 1997 (1,051), followed by "voluntary departure incentive" (241);
- Outflows associated with retirement (118) and wastage, or those leaving teaching voluntarily for a non teaching job (32), were quite small.

In Queensland there were around 580 separations in 1997 (610 expected in 1998), of whom 184 were retirees. South Australia had 144 separations in 1997 (177 estimated in 1998), with only 20 retirees in 1997 (28 in 1998). Western Australia had 226 separations in 1997, including 33 retirees.

- The number of separations is quite low in Tasmania (68 in 1997, and just 6 retirees) and the ACT (76 in 1997, with 25 retirees).
- Northern Territory separations are higher at 325 in 1997, with the largest categories being voluntary departure incentive (118) and non renewal of fixed term contracts (106). There were just 15 retirees.

Secondary

In New South Wales there were approximately 680 separations of secondary teachers in 1997 and about 715 are expected in 1998, and of these approximately 245 retired, 345 resigned and around to 90 retired on medical grounds. In Victoria, there were approximately 1,710 separations in 1997 (1,520 are expected in 1998):

- Non renewal of fixed term contract was the main reason for separation in 1997 (885), followed by "voluntary departure incentive" (315 in 1997, reducing to 65 in 1998);
- Outflows associated with retirement (100 in 1997 and 132 expected in 1998), and wastage, or those leaving teaching voluntarily for a non teaching job (94), were quite small.

In Queensland there were around 690 separations in 1997 (720 expected in 1998), of whom about 140 were retirees. South Australia had 97 separations in 1997 (107 estimated in 1998), with only 14 retirees in 1997 (19 in 1998). Western Australia had 216 separations in 1997, including 21 retirees.

- The number of separations is quite low in Tasmania (65 in 1997, and just 6 retirees), the ACT (80) and the Northern Territory (142 in 1997, with 10 retirees).

Long-term leave

A number of State education authorities have provided information on the impact of long term leave on the supply of teachers. The general trend in both government primary and secondary schools is for the number of teachers going on long term leave to be balanced by teachers returning from long term leave. Consequently long term leave has little impact on the aggregate supply of teachers.

Earnings

Comments from the sector suggest that the relative salary and working conditions of secondary school teachers have been encouraging wastage from the profession, although recent pay increases in some States may be easing this pressure. Statistical evidence suggests a decline in recent years in the relative salaries for primary school teachers but there has not been a sustained pattern of change in relative salaries for secondary school teachers.

ABS data on mean weekly earnings of full-time workers in their main job indicate that from August 1990 to August 1997 (latest data) earnings of primary school teachers did not keep pace with those of all employed professionals and all employees (these groups increased by 34 per cent and 38 per cent respectively, while primary school teachers' earnings rose by 31 per cent). Primary school teacher earnings represented between 85 per cent to 89 per cent of professional employee earnings and between 107 per cent and 115 per cent of earnings of all employees.

The ABS data, however, indicate that from 1990 to 1997 earnings of secondary school teachers slightly more than kept pace with those of all employed professionals but declined marginally against all employees (secondary school teachers earnings increased by 35 per cent whereas these groups increased by 34 per cent and 38 per cent respectively). Their earnings represented between 91 per cent to 95 per cent of professional employee earnings and between 115 per cent and 124 per cent of earnings of all employees - see Table 11. With the change to a new occupational code (ASCO Version 2) in 1996 the composition of the category 'professionals' altered and this may have impacted upon the relative earnings of this occupational group.

TABLE 11: MEAN WEEKLY EARNINGS OF FULL-TIME EMPLOYEES IN MAIN JOB - PRIMARY AND SECONDARY SCHOOL TEACHERS, PROFESSIONALS AND ALL EMPLOYEES, AUGUST 1990 TO AUGUST 1997*

Occupation	1990	1991	1992	1993	1994	1995	1997
	$	$	$	$	$	$	$
Primary School Teachers	574	615	638	673	695	703	754
Secondary School Teachers	599	662	684	699	737	741	810
Professionals	661	701	722	760	793	817	884
All Employees	507	533	555	587	610	630	702
Primary School Teachers as a percentage (%) of :							
Professionals	87	88	88	89	88	86	85
All Employees	113	115	115	115	114	112	107
Secondary School Teachers as a percentage (%) of :							
Professionals	91	94	95	92	93	91	92
All Employees	118	124	123	119	121	118	115

* Data were not collected in 1996. 1997 data were coded to a new occupational classification (ASCOII)

Source: ABS, *Weekly Earnings of Employees (Distribution) Australia, 1990 - 1997* (Cat.No. 6310.0) and unpublished data

Since 1992 starting salaries for teachers have been in the middle ranking of the 23 fields of study covered by GCCA's *Graduate Starting Salaries* reports (See Table 12). It should be noted that there is only a relatively small difference between the salaries of the middle group of fields of study (for example, in 1996 the gap between the sixth and fourteenth ranked fields was $3,000, whereas the difference from the highest to the lowest salary was some $19,000).

TABLE 12: GRADUATE STARTING SALARIES, FIELDS OF STUDY RANKED ACCORDING TO LEVEL OF STARTING SALARY, AUSTRALIA, 1992 TO 1996

FIELD OF STUDY	1992	1993	1994	1995	1996
Dentistry	1	2	2	1	1
Medicine	2	1	1	2	1
Optometry	3	3	3	3	3
Engineering	4	5	4	4	5
Earth Sciences	6	4	4	5	3
Computer Science	5	6	6	6	6
Vet. Science	8	7	6	7	6
Physical Science	9	7	8	7	9
Education	**11**	**12**	**10**	**9**	**10**
Social Work	10	9	9	10	11
Mathematics	7	10	10	11	6
Ag. Science	12	13	14	12	18
Paramedical Studies	12	11	12	13	12
Bio. Sciences	12	13	13	13	13
Psychology	17	13	14	13	14
Econ/Business	12	13	14	13	14
Accounting	12	17	14	13	14
Other Social Sciences	18	18	14	18	18
Arch. & Building	21	19	20	19	18
Law	20	19	20	19	17
Humanities	19	19	19	19	21
Art & Design	22	19	22	22	22
Pharmacy	23	23	23	23	23

Source: GCCA, *Graduate Starting Salaries 1996*

PART C AGE PROFILE OF TEACHERS

Age Structure - All Teachers

Ageing of the school teacher employed labour force is likely to increase wastage rates and result in reduced teacher supply, thus presenting a significant risk of emerging teacher shortages in the longer term. In particular, concern has been expressed about the possible reduction in teacher supply resulting from a substantial cohort of teachers approaching retirement, or early retirement, age groups.

Several factors including the availability of alternative employment opportunities, relative wages, working and superannuation conditions for teachers, fertility patterns and the availability of child care influence wastage from primary and secondary school teaching and the resultant age profile. The ageing of the teaching workforce is often raised as a potential cause of prospective recruitment difficulties for teachers and this matter clearly warrants attention. Data limitations prevented a more comprehensive assessment of the impact of the age profiles on future teacher supply and recruitment needs.

Age related issues

There are several issues that relate to the age structure and prospective supply of teachers:

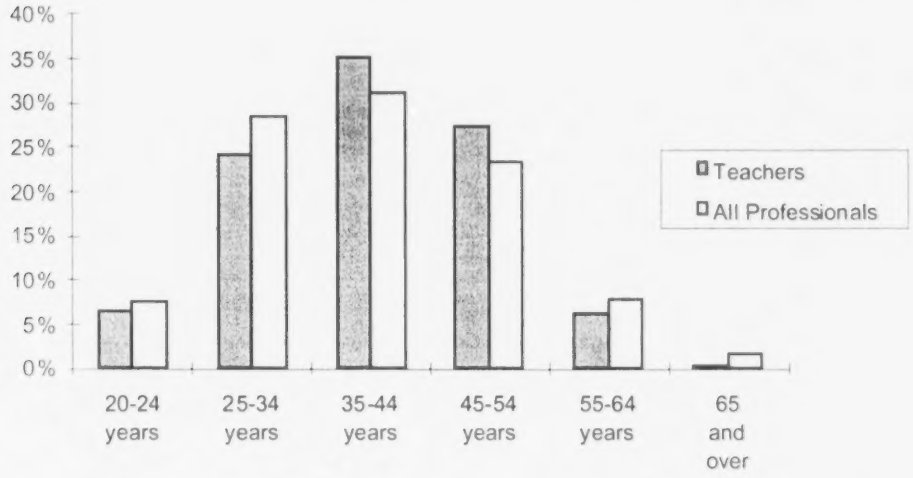
- To what extent is the teaching workforce skewed towards older age groups? How does the age structure for teachers compare with other professionals?
- How does the age structure compare across States/Territories? Which States/Territories are potentially facing supply problems from the ageing teaching workforce?
- What are the overall prospects for the supply of teachers over the next few years, in view of the age structure for the profession?
- Qualitatively, what are the main reasons for teacher separations and can this information assist in understanding possible trends for those approaching (early) retirement?

This paper provides information on these aspects of the teaching workforce, although data gaps preclude inferences being drawn in some instances. The ABS Labour Force Survey provides data for the occupational group *school teachers*, including pre-primary school teachers and special education teachers as well as primary school teachers and secondary school teachers. Data for school teachers as a group are more statistically robust than for secondary teachers and primary teachers separately.

- The figures suggest that the impact of retirements in coming years will be much greater for school teachers than for professional occupations as a whole.

School teachers are relatively more concentrated than all professional occupations in the 35 to 44 and 45 to 54 year age ranges, but then appear to leave the profession more rapidly, being relatively under-represented in the 55 and over age ranges (see Figure 15). The below average share of teachers in the less than 35 years age group is of concern, and may partly reflect the lower share of graduates entering teaching in the past decade compared with other professions and limited government recruitment.

FIGURE 15: AGE PROFILE - EMPLOYED SCHOOL TEACHERS AND ALL PROFESSIONALS, 1997 (%)



Source: ABS, *Labour Force Survey* (microfiche and unpublished) - based on 1997 averages.

While subject to relatively high sampling variability ABS Labour Force employment by age group data for *primary* and for *secondary* teachers reveal an ageing profile. The Labour Force data have been averaged to reduce the year to year volatility in the estimates. A comparison of the average age profile for 1988-92 with that of 1994-98 indicates that those aged 45 and over increased by about 4.5 percentage points for primary school teachers and by 7.5 percentage points for secondary school teachers (see Tables 13 and 14).

TABLE 13: AGE PROFILE OF PRIMARY SCHOOL TEACHERS - AVERAGE MAY DATA 1988-92 AND 1994-98

	Average 88-92		Average 94-98		% Points Change
	(000s)	%	(000s)	%	
AGE					
20-24	13.2	12.8	14.9	13.2	0.4
25-29	18.0	17.5	12.7	11.2	-6.2
30-34	22.0	21.4	19.8	17.4	-3.9
35-39	20.6	20.0	25.1	22.2	2.2
40-44	14.0	13.6	18.9	16.7	3.1
45-49	9.1	8.8	12.9	11.3	2.5
50-54	4.1	4.0	6.5	5.7	1.7
54-59	1.8	1.8	2.2	1.9	0.2
60-64	0.1	0.1	0.3	0.2	0.1
65+	0.0	0.0	0.1	0.1	0.1
TOTAL	**103.0**	**100.0**	**113.3**	**100.0**	
35-44	34.6	33.6	44.1	38.9	5.3
45+	15.2	14.8	21.8	19.3	4.5

Source: ABS, *Labour Force Survey* (unpublished).

TABLE 14: AGE PROFILE OF SECONDARY SCHOOL TEACHERS
- AVERAGE MAY DATA 1988-92 AND 1994-98

	Average 88-92		Average 94-98		% Points Change
	(000s)	%	(000s)	%	
AGE					
20-24	12.4	10.8	11.7	10.9	0.1
25-29	19.2	16.8	12.3	11.4	-5.4
30-34	25.2	22.1	17.3	16.1	-6.0
35-39	24.3	21.2	23.0	21.4	0.2
40-44	17.2	15.1	20.1	18.7	3.6
45-49	8.4	7.4	14.6	13.6	6.2
50-54	4.3	3.8	6.0	5.6	1.8
54-59	2.4	2.1	2.1	2.0	-0.1
60-64	0.8	0.7	0.3	0.3	-0.4
65+	0.1	0.1	0.1	0.1	0.0
TOTAL	**114.4**	**100.0**	**107.5**	**100.0**	
35-44	41.5	36.3	43.1	40.1	3.8
45+	16.1	14.0	23.2	21.5	7.5

Source: ABS, *Labour Force Survey* (unpublished).

Age Structure - Government Sector by State/Territory

Details of the age structure for government *primary teachers* are presented in Table 15 and in Figure 16 (more detailed data are presented in Appendix C). Around 70 per cent of primary teachers in the government sector are aged 35 to 54 years. The government sector has a lower proportion of teachers *aged under 35 years*: 22.9 per cent compared with 30.6 per cent for all teachers, and 35.8 per cent for all professions.

- Conversely, the proportion aged 45 to 54 years is higher at 32.4 per cent, well above the share of this age group for all teachers (27.4 per cent) and all professions (23.3 per cent).
- Early retirement of teachers is evident with the proportion aged 55 years and over (6.6 per cent) close to all sector teachers, but below the 9.4 per cent for all professions.

There are differences in the age structure between States and Territories. The proportion of primary teachers aged *45 years and over* varies from the lowest of 30.0 per cent in Queensland and 35.1 per cent in the Northern Territory to above 40 per cent for New South Wales (42.5 per cent), Western Australia (42.8 per cent) and the ACT (a very high 54.1 per cent).

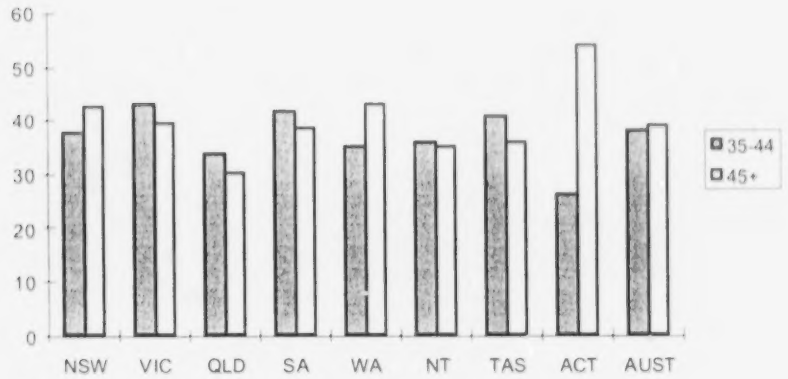
- The younger age profile for Queensland is evident with 36.4 per cent aged under 35 years; while Western Australia has the highest proportion aged 55 years and over (11.1 per cent).

TABLE 15: GOVERNMENT PRIMARY SCHOOL - AGE STRUCTURE IN YEARS AS AT AUGUST 1997 (% OF TOTAL)

State/Territory	< 35	35-44	45-54	55+	45+
New South Wales	19.7	37.8	34.7	7.8	*42.5*
Victoria	17.7	42.8	35.6	3.9	*39.5*
Queensland	36.4	33.6	24.1	5.9	*30.0*
South Australia	20.0	41.5	33.9	4.6	*38.5*
Western Australia	22.0	35.1	31.8	11.1	*42.8*
Tasmania	23.0	40.9	28.4	7.7	*36.1*
Northern Territory	29.0	35.9	27.7	7.4	*35.1*
ACT	19.9	26.0	45.3	8.8	*54.1*
Australia	**22.9**	**38.1**	**32.4**	**6.6**	***39.0***
All teachers - all sectors	30.6	35.2	27.4	6.7	*34.1*
Professionals	35.8	31.0	23.3	9.4	*32.7*

Source: *State/Territory education authorities*

FIGURE 16: PERCENTAGE OF GOVERNMENT PRIMARY TEACHERS AGED 35-44 AND 45 YEARS AND OVER - AUGUST 1997



Details of the age structure for government *secondary teachers* are presented in Table 16 and in Figure 17 (more detailed data are presented in Appendix C). As for primary teachers, around 70 per cent of secondary teachers in the government sector are aged 35 to 54 years. The government sector has a lower proportion of secondary teachers *aged under 35 years*: 23.6 per cent compared with 30.6 per cent for all teachers (including pre-primary and special), and 35.8 per cent for all professions.

- Conversely, the proportion aged 45 to 54 years is higher at 34.3 per cent, well above the share of this age group for all teachers (27.4 per cent) and all professions (23.3 per cent).
- The share of secondary teachers aged 55 years and over (6.5 per cent) is just below the figure for all sectors, and well below the 9.4 per cent for all professions.

There are differences in the age structure between States and Territories. The proportion of secondary teachers aged *45 years and over* varies from the lowest of 32.1 per cent in Queensland and 38.5 per cent in Tasmania to the highest of 47.0 per cent in South Australia and a very high 53.7 per cent in the ACT.

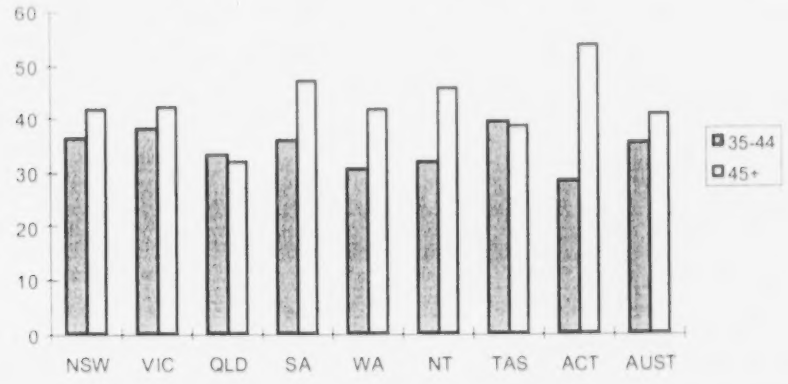
- The younger age profile for Queensland is evident with 34.7 per cent aged under 35 years;
- Western Australia has the highest proportion aged 55 years and over (10.3 per cent).

TABLE 16: GOVERNMENT SECONDARY SCHOOL - AGE STRUCTURE IN YEARS AS AT AUGUST 1997 (% OF TOTAL)

State/Territory	< 35	35-44	45-54	55+	45+
New South Wales	22.1	36.3	34.3	7.3	41.6
Victoria	19.7	38.2	37.3	4.8	42.1
Queensland	34.7	33.2	27.1	5.0	32.1
South Australia	17.0	36.0	41.4	5.6	47.0
Western Australia	27.7	30.7	31.3	10.3	41.5
Tasmania	22.0	39.5	32.0	6.5	38.5
Northern Territory	22.4	32.1	37.1	8.4	45.5
ACT	18.0	28.2	44.3	9.5	53.7
Australia	**23.6**	**35.6**	**34.3**	**6.5**	**40.8**
All teachers - all sectors	30.6	35.2	27.4	6.7	34.1
Professionals	35.8	31.0	23.3	9.4	32.7

Source: *State/Territory education authorities*

FIGURE 17: PERCENTAGE OF GOVERNMENT SECONDARY TEACHERS AGED 35-44 AND 45 YEARS AND OVER - AUGUST 1997



Implications of Age Profile

The largest cohort of teachers, in most States/Territories, is 35 to 44 years. The key issue in respect of the impact of the teacher age profile on future labour supply is the net outcome of two counterbalancing forces:

- The shift of the 35 to 44 years cohort into the low separation 45 to 54 years age group; and
- The shift of the 45 years and over group into the retirement, and early retirement, ages.

The shift of the age profile of teachers into the 35 to 44 and 45 to 54 year age groups is of concern, although this trend in part reflects low recruitment levels in the early and mid 1990s (less younger entrants to balance the age structure). The increase in the share of the 45 years and over group for secondary teachers (a rise of 7.5 percentage points according to averaged ABS labour force data) is especially noteworthy.

Nevertheless, the teaching workforce remains concentrated in the 35 to 44 year age group (around 40 per cent of both primary and secondary teachers), suggesting that the age profile for teachers may not impact substantially on teacher supply in the next few years. The (albeit) limited information available on reasons for separations from teaching employment, especially relatively low levels of retirements, supports this view.

The longer term effects are likely to be considerable if recruitment levels are low. This applies particularly to the government sector where the proportion of teachers aged 45 years and over (around 40 per cent for both primary and secondary teachers) is considerably higher than for all teachers.

PART D LABOUR MARKET OUTLOOK FOR TEACHERS

Balance of Demand and Supply (Key Parameters)

The paper canvasses a considerable amount of information on factors affecting the supply and demand for teachers, and it is important to be able to identify and focus on those parameters that are uncertain and markedly influence the *net* outcome of the interaction of supply and demand. This is needed to address the core issues:

- Will the supply of teachers be sufficient to meet future demand, especially in the next five years?
- What are the risks? What demand or supply developments could result in shortages of teachers emerging?
- Is the mix of teachers right, or will shortages of particular specialisations get worse, especially in secondary schools?
- What are some broad strategies that could be implemented to ensure an adequate supply of teachers?

Sensitivity Analysis

Three key variables are likely to have a significant influence on future teacher supply. These variables are: completions of initial education courses; the pool of qualified teachers not currently employed as teachers: and separation rates from teaching.

The supply section of this report has indicated that, while there has been a downward trend in *completions* of initial education courses (a fall of over 40 per cent for 'Initial Primary School Higher Education' and 20 per cent for 'Initial Secondary School Higher Education' between 1989 and 1996), recent rises in course commencements suggest this trend may ease and even turnaround to growth (1997 commencements in relevant courses were at the highest level since 1990). Greater flexibility in the supply of teachers appears likely with a shift from undergraduate to one or two year postgraduate courses for teacher training. Overall the supply of teaching graduates should be maintained, although monitoring of trends in both completions and commencements is important in view of the longer term impact of the age profile of the teaching workforce.

The impact of the available pool of qualified secondary teachers, not currently working as teachers, on future supply is problematic. Although the demand for teachers has improved, the legacy of low demand in the early to mid 1990s is a large pool of teachers either unemployed, working in alternative full-time or part-time employment, or not in the labour force. In New South Wales alone in late 1997 there were about 15,500 teachers registered for employment with the NSW Department of School Education.

Some of those in the pool of teachers will remain in, or gain, alternative employment, may choose to remain outside the labour force for family reasons, or may only wish to work casually or part-time. Nevertheless many are seeking a longer term career in teaching and represent a significant source of supply, especially if the demand for teachers improves.

The discussion in the supply section also reveals that the teacher age profile is ageing, but indicates that age related separations may not impact substantially for several years. Information available on separations from teaching does not indicate significant wastage of qualified teachers through early retirement and teachers moving to non teaching jobs. More information on, and closer monitoring of, teacher separations would be helpful in providing more reliable conclusions on the prospects for separations over the next few years.

The sensitivity of teacher demand to some parameters has been examined earlier in the report, and these findings are summarised below:

Retention Rates

Overall secondary teacher demand could increase by *around 1.1 per cent* if retention rates rise slightly, although year 11 demand would grow by 2.4 per cent; and *year 12 by 4.2 per cent.*

- Stronger rises (to above the record levels recorded in 1992) could result in a rise in secondary teacher demand of *2.2 per cent*, while year 11 demand would rise 4.7 per cent; and *year 12 by a strong 8.4 per cent.*

Student Enrolments

Primary enrolments are determined by demographic trends and are unlikely to vary much from the projections, especially in view of recent falls in the migration intake.

- *Secondary* enrolments similarly can be expected to be close to the projected levels, although retention rate variations add some uncertainty.

Student to Teacher Ratio

Primary school: if the overall student to teacher ratio fell by 0.5 to 17.4, primary teacher demand would be *around 2.9 per cent higher* than if the ratio remained unchanged.

- *Secondary school*: a fall in the student to teacher ratio of 0.5 to 12.2 would *increase secondary teacher demand by around 4.1 per cent.*

Teacher Recruitment - Government

As indicated in Table 17, government sector recruitment of both primary and secondary teachers is expected to rise in the next few years. For *primary* teachers recruitment is projected to rise by around 400 from around 4,100 in 1997 and 4,200 in 1998 to 4,500 by 2001; while for *secondary* teachers annual recruitment is expected to increase from 4,800 in 1997 and 5,000 in 1998 to 5,100 in 2001. The main contributors to recruitment growth between 1997 and 2001 are:

- *Primary*: ACT (just under 200) and South Australia (140), while Tasmania expects a decline;
- *Secondary*: South Australia (about 160), the ACT (150) and the Northern Territory (75).

TABLE 17: PRIMARY AND SECONDARY SCHOOL TEACHERS (FTE) - GOVERNMENT RECRUITMENT 1997 TO 2001[1]

State/Territory	1997 actual	1998 projected	1999 projected	2000 projected	2001 projected
PRIMARY					
New South Wales	1338	1350	1363	1373	1370
Victoria	628	710	730	680	630
Queensland	1373	1382	1386	1392	1398
South Australia	180	168	238	250	320
Western Australia	219	200	200[2]	200[2]	200[2]
Tasmania	182	120	119	118	129
Northern Territory	96	127	139	153	155
ACT	63	127	180	200	250
Australia	***4079***	***4184***	***4355***	***4366***	***4452***
SECONDARY					
New South Wales	1761	1775	1747	1741	1712
Victoria	733	790	690	690	700
Queensland	1675	1683	1689	1687	1686
South Australia	135	181	231	265	295
Western Australia	248	250	250[2]	250[2]	250[2]
Tasmania	147	98	97	97	106
Northern Territory	98	111	135	155	175
ACT	49	89	130	150	200
Australia	***4846***	***4977***	***4969***	***5035***	***5124***

Source: *State/Territory education authorities*

(1) as at March 1998

(2) DEETYA assumptions. As far as possible casual and temporary teachers are not included in statistics.

Some of the increased government sector recruitment is associated with the need to replace teachers who are approaching retirement, rather than to provide for increased enrolments, while some teachers are recruited to replace those who may leave the government sector for non-government schools. Public sector expenditure constraints will limit any growth in teacher recruitment. As enrolment growth is projected to be concentrated in the non-government sector, the demand for *additional* teachers will also come primarily from the non-government sector, a continuation of trends in recent years

Given the downward trend in education completions, the possibility of increased recruitment difficulties in the medium to longer term should be acknowledged. It would be desirable to target recruitment strategies at areas of specialisation that are already showing evidence of recruitment difficulty.

Specialisations Experiencing Recruiting Difficulties

Advice from DEETYA State/Territory Labour Economics Offices (LEOs) indicates that recruiting difficulties for secondary school teachers are restricted to particular specialisations, such as information technology, certain languages (particularly some Asian languages), physical education, music and mathematics/science.

Government Sector Recruitment Difficulties

State and Territory education authorities have provided advice to DEETYA on recruiting difficulties for teachers. This information indicates that secondary school mathematics, science and industrial arts are the teaching specialisations with the most widespread recruitment difficulties. For these specialisations, recruitment difficulties are being experienced in at least part of New South Wales, Queensland, South Australia, Western Australia, Tasmania and the Northern Territory (see Table 18).

Recruitment difficulties are most evident in the Northern Territory, Western Australia, and Tasmania, with each having five or six secondary school teaching specialisations with recruiting difficulty in part of their State/Territory. The Australian Capital Territory education authority, on the other hand, reports no significant recruitment difficulties for teacher specialisations (see also Table 18).

- Very few recruitment difficulties were reported in respect of primary school teachers.

TABLE 18: GOVERNMENT SECTOR RECRUITMENT DIFFICULTIES BY SECONDARY SCHOOL TEACHING SPECIALISATION

Specialisation	NSW	VIC	QLD	SA	WA	TAS [5]	NT	ACT
Information technology				R	M R	R	M R	
Sport/Physical education			R		R	R	R	
Music						R	R	
Mathematics	R		R	M R	M R	R	M R	
Science	R		M R	M R[3]	M R	R	M R	
Industrial Arts	M R		R	M R	M R	R	R	
Asian Languages		M R		M R				
Other Languages (other than English)		R[1]	M R					
Other (please specify)			M[2] R[2]	M R[4]			R[6]	

M = Metropolitan Area; R = Country/Rural

1. Recruiting difficulties are emerging in some country areas in French and German - in particular the Loddon Campaspe - Mallee region, based at Bendigo.
2. Manual Arts, Business/Information Technology, Senior English.
3. Including Agricultural Studies.
4. Dance and Media Studies (to Year 12).
5. Tasmania has experienced some difficulties in filling positions outside the Greater Hobart area through the Department's Temporary Teacher Register. The difficulties were with one position in each of the following subject areas: information technology, physical education, music, mathematics, science and industrial arts. The positions offered have been medium term temporary positions (less than a year's duration and/or part-time). The positions were filled after advertisement in Tasmanian newspapers.
6. Accounting, Economics.

Prospects for Teachers

Demand for secondary school teachers is likely to increase as a response to demographic changes, the possible effects of the Youth Allowance on retention rates, growth in the non-government school sector, and some increased recruitment associated with higher flows out of teaching due to retirement. Lower numbers of graduates may improve the employment prospects for new teaching graduates and qualified teachers not presently working in teaching positions.

Recent trends in commencements and completions of Secondary and Primary School Higher Education courses suggest that the supply of those qualifying as primary and secondary school teachers could decline in the short-term (next two to three years), but some increase seems likely thereafter in view of a rise in commencements. Nevertheless, anyone with an appropriate Bachelor degree could qualify as a secondary school teacher by completing a Graduate Diploma in Education (one year), or a two year post-graduate initial teacher education course and this alternative could add to the supply of qualified teachers within a shorter time frame than is feasible through undergraduate courses.

It follows that any shortfall in training could be addressed relatively quickly, assuming there is a ready supply of graduates in the required *areas of specialisation*. There is, in addition, a significant pool of qualified persons who are not currently employed as teachers, although the readiness and ability of such people to be able to work in specialisations or geographical areas where vacancies occur is uncertain.

Recruitment Strategies

In view of the likelihood that the labour market for teachers will move towards increasing employment opportunities, it is worthwhile examining recruitment strategies. A more broadly based assessment of strategically preparing for stronger demand, especially some specialisations is also warranted. State/Territory education authorities provided advice on some recruitment strategies currently in place, and some of these are noted below.

New South Wales: The Department promotes teaching as a career to both men and women in a number of ways including presentations at careers fairs for school and university students, advertising in publications which target university graduates and a range of promotional materials. The *Graduate Recruitment Program* has been particularly successful in attracting outstanding graduates to New South Wales government schools. Each year up to 400 positions in primary and secondary schools are filled under this program. Graduates are only eligible to apply for appointment under this program in the year they complete their academic studies.

Victoria: In Victoria, government schools are responsible for their own recruitment and employment of teaching staff. Principals must advertise vacancies of 6 months or longer through the Department of Education newspaper, but may elect to also advertise such posi. ons in the public press. Some school principals (particularly from country regions) actively canvass at university campuses to encourage final year teacher education students to apply for positions at their schools. Department of Education officers visit university campuses (at the request of Faculty of Education staff) to address students on procedures for obtaining employment.

In January 1998 the Department of Education undertook a radio advertising campaign intended to encourage young men to consider a career in primary teaching. This campaign resulted in over 500 phone calls to the Department's Enquiry Line, including men and women of all ages. As part of this campaign a coloured brochure was prepared which will be sent to school and university careers offices together with a Facts Sheet on primary teaching, to provide further information for young people considering a teaching career. Any resultant increases in applications for teacher education courses will not be evident before 1999.

Queensland: Each year Queensland runs an advertising campaign in the television and radio medium to encourage school leavers to consider teaching as a rewarding career opportunity. A careers market display is coordinated centrally and travels around the State for display at various careers markets. Since 1997 teaching scholarships have been offered in the areas of Manual Arts, Business/Information and Senior English.

South Australia: is considering the possibility of paying HECS for the final year for selected individuals, along with a conditional offer of employment. DETE encourages links between DETE and the graduating cohort and schools in the country are able to recruit teachers directly. Country practicums are also available.

Western Australia: The Department is currently working on enhancements to the Country Incentives Package, and Teaching scholarships have been offered since 1997. For 1999, the Department will be marketing teaching positions in rural/remote areas.

Tasmania: Strategies include early advertising and filling of permanent vacancies; reserving "city" positions for transfers and permanently recruiting only to rural/remote positions; and scholarships for maths, science and info tech graduates to complete a Bachelor of Teaching degree with the offer of permanent appointment upon successful completion.

Northern Territory: recruitment methods include extensive, targeted advertising and distribution of comprehensive recruitment packages to applicants and selected tertiary education faculties. There is also encouragement and support for undergraduate practicums in the Northern Territory urban and remote schools.

ACT: The ACT has increased offers of permanent positions and is looking at some retraining options. The recruitment net is being expanded to include SA and Queensland with visits planned to training institutions. The ACT is investigating training options with the University of Canberra to provide training pathway for Industrial Arts teachers.

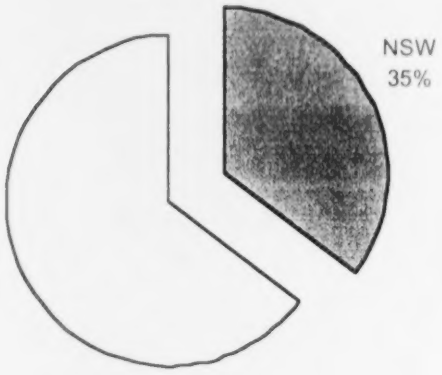
PART E STATE/TERRITORY TEACHER LABOUR MARKETS

The geographical aspect of the labour market for teachers is important, with school education being predominantly a State/Territory responsibility. While primary and secondary school teachers are in general oversupply or balance in all States/Territories apart from the Northern Territory (see Figure 18), a general continuation or worsening of existing specialisation recruiting difficulties is indicated. Recruitment is expected to remain more difficult in some rural and remote locations.

FIGURE 18: GENERAL LABOUR MARKET ASSESSMENT FOR PRIMARY AND SECONDARY SCHOOL TEACHERS 1998 BY STATE AND EMPLOYMENT SIZE

New South Wales

PROPORTION OF PRIMARY AND SECONDARY SCHOOL TEACHERS (COMBINED) EMPLOYED IN NSW, 1997



In 1997 an annual average of approximately 83,700 primary and secondary school teachers were employed in New South Wales according to ABS Labour Force Survey estimates. Of these 38,300 were primary school teachers and 45,400 were secondary school teachers, representing 31 per cent and 39 per cent respectively of Australian employment in these occupations.

The labour market for primary school teachers is presently in oversupply in NSW. Neither the government nor the non-government school sectors report any significant recruiting difficulties for primary teachers. The Catholic school sector indicates that there are no major supply problems even in areas of strong growth such as western Sydney and northern NSW. Some recruitment difficulties are evident in traditionally hard-to-fill areas such as the more remote schools in western NSW, but the NSW Department of Education and Training (DET) advises that even in these areas supply problems are not significant in government schools.

Over the medium term, primary school teachers are expected to remain in oversupply although minor recruitment difficulties in traditionally difficult to fill locations should continue.

The labour market for secondary school teachers in NSW remains in oversupply. However, there are numerically small recruitment problems in some subject areas, in some locations and for casual teachers in general. DET reports few teacher recruitment difficulties in NSW. The most significant difficulties are for Industrial Arts teachers - a specialised subject area of Technological and Applied Studies (TAS). DET has responded to recruitment difficulties in various ways including retraining teachers into the TAS specialisation through short in-house courses. Isolated recruitment difficulties have also been reported of teachers in other specific subjects or subject combinations such as maths/computing and agriculture/science. These recruitment difficulties are mostly evident in remote rural areas such as western and south-western NSW and, from time-to-time, in outer metropolitan areas of Sydney. Occasional problems in recruiting Japanese language teachers in some less popular locations were also reported.

The non-government sector also has few supply difficulties. Catholic schools report that supply of teachers is generally adequate, even in high growth areas. Some recruitment difficulties of TAS teachers are evident and, in response, the Catholic system has introduced a sponsorship scheme to enable suitable graduates to acquire teaching qualifications through its own teacher education program. Other non-government schools indicate that vacancies in subject areas such as maths/computing, maths/science and agriculture were proving more difficult to fill but few report any significant recruitment difficulties in these areas.

Current areas of recruitment difficulty are likely to persist over the short term and sporadic difficulties in areas such as vocational studies, Asian languages, maths and science may also emerge. The medium-term outlook is for a more balanced overall labour market for secondary school teachers but with specific areas of recruitment difficulty continuing.

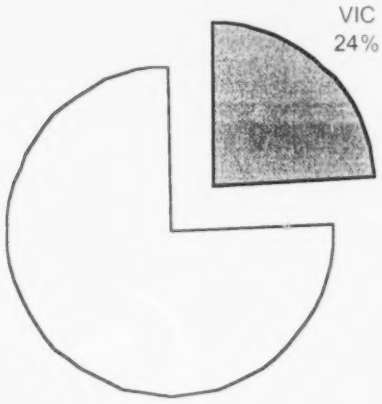
All sectors report increasing problems in filling vacancies for casual relief primary and secondary school teachers. The main sources of casual teachers are recent teacher graduates who are unable to find suitable full-time work and women with families seeking casual work. It is likely, therefore, that the reduced supply of teachers seeking casual employment is partly due to the decline in graduate numbers in recent years (and the improvement in graduate, full-time employment) and possibly also to the ageing of the teacher workforce, which means that a smaller proportion are seeking to combine casual teaching with family responsibilities.

A survey of the availability of casual teachers to work in government primary schools was undertaken by the NSW Primary Principals' Association in mid-1997. Two-thirds of schools surveyed indicated that it had become increasingly difficult to obtain casual teachers over the last few years, especially in smaller rural schools.

To address the issue the NSW DET is conducting two trial schemes, the Preferred Employment Scheme for Casual Teachers and the Advanced Casual Employment Scheme, which will provide incentives for new graduates and others who are seeking permanent employment as teachers to work as casuals in the interim.

Victoria

PROPORTION OF PRIMARY AND SECONDARY SCHOOL TEACHERS (COMBINED) EMPLOYED IN VIC, 1997



In 1997 an annual average of approximately 57,600 primary and secondary school teachers were employed in Victoria according to ABS Labour Force Survey estimates. Of these 27,800 were primary school teachers and 29,800 were secondary school teachers, representing 23 per cent and 26 per cent respectively of Australian employment in these occupations.

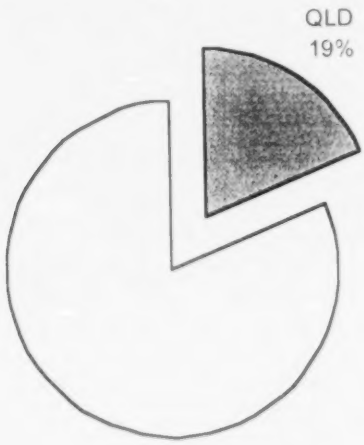
The labour market for primary and secondary school teachers in Victoria has changed significantly over the 1990s. Following the introduction of Public Sector reforms in 1992 and the offer of Voluntary Departure Packages (VDP's) to the government sector workforce including school teachers, there has been a marked reduction in the government teaching workforce, of approximately 6,400 FTE.

Currently there is a more than adequate supply of both new entrants and experienced primary and secondary school teachers with a pool of unemployed school teachers, a proportion of which could be available for re-entry to the profession either on a full-time or contract basis. Nevertheless there is evidence of recruitment difficulties for primary and secondary teachers in both the government and non-government school sectors for Languages Other Than English (LOTE) - Indonesian, Japanese and Other LOTE, and for secondary teachers in Information Technology.

Over the next five years demand for primary and secondary school teachers should increase moderately based on projected increasing school enrolments, with funding restraints in the government sector preventing any decrease in student teacher ratios. However, with the average age of the Victorian government school teacher population of 42.5 years (August 1997) the labour market for both primary and secondary school teachers should not be a problem in the short to medium term, other than some recruitment difficulties in some specialist areas.

Queensland

PROPORTION OF PRIMARY AND SECONDARY SCHOOL TEACHERS (COMBINED) EMPLOYED IN QLD, 1997



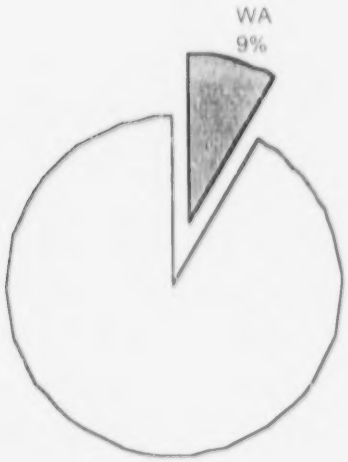
In 1997 an annual average of approximately 45,000 primary and secondary school teachers were employed in Queensland according to ABS Labour Force Survey estimates. Of these 26,100 were primary school teachers and 18,900 were secondary school teachers, representing 21 per cent and 16 per cent respectively of Australian employment in these occupations.

The labour market for primary school teachers in both government and non-government sectors is currently in balance across all regions of the State, with a concentration of new graduates in the remote and rural centres.

Despite a general oversupply of new graduate teachers in the early 1990s, the secondary education system in this State suffered recruitment difficulties for teachers of some specific subject areas - particularly science, mathematics and LOTE. These difficulties have largely been ameliorated in the non-government sector: however, they persist in government schools and additional recruitment problems have emerged in manual arts.

Western Australia

PROPORTION OF PRIMARY AND SECONDARY SCHOOL TEACHERS (COMBINED) EMPLOYED IN WA, 1997

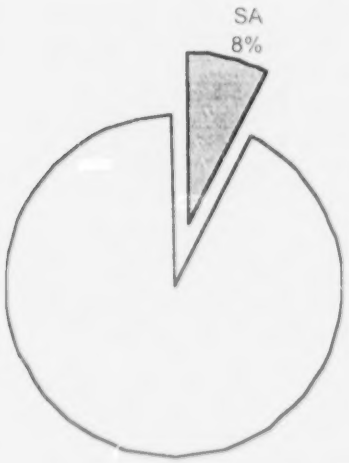


In 1997 an annual average of approximately 20,600 primary and secondary school teachers were employed in Western Australia according to ABS Labour Force Survey estimates. Of these 12,500 were primary school teachers and 8,100 were secondary school teachers, representing 10 per cent and 7 per cent respectively of Australian employment in these occupations.

The Western Australian labour market for primary school teachers is in balance. While the overall labour market for secondary school teachers is also in balance, vacancies for teachers specialising in the following subject areas: mathematics, science, industrial arts, as well as technology and enterprise (accounting, business, computing, home economics, manual arts and agriculture) have been difficult to fill. Teaching positions located in remote country locations have also proven difficult to fill in both the government and non-government sectors. There are indications of oversupply in some areas of specialisation with teachers whose main area of training was in art or biology experiencing the most difficulty in finding employment.

South Australia

PROPORTION OF PRIMARY AND SECONDARY SCHOOL TEACHERS (COMBINED) EMPLOYED IN SA, 1997



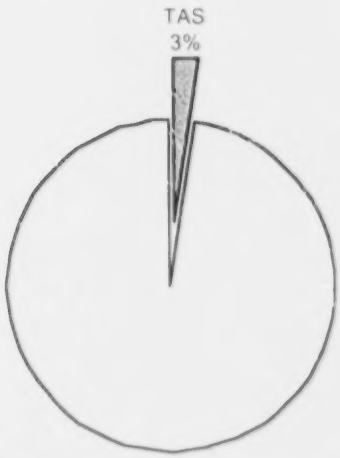
In 1997 an annual average of approximately 18,200 primary and secondary school teachers were employed in South Australia according to ABS Labour Force Survey estimates. Of these 10,400 were primary school teachers and 7,900 were secondary school teachers, representing 9 per cent and 7 per cent respectively of Australian employment in these occupations.

Currently an oversupply of primary and secondary teachers exists in the State. Nevertheless, there are seasonal difficulties in recruiting teachers in some subject areas, such as LOTE in primary and secondary schools and, in secondary schools, mathematics and physics and industrial arts. Government, Catholic and Lutheran sectors advise that recruitment difficulties are most evident in remote areas, particularly in the north of the State.

The wastage rates for primary and secondary teachers, particularly principals, are expected to increase from around the year 2002 as many reach the age when they consider retirement.

Tasmania

PROPORTION OF PRIMARY AND SECONDARY SCHOOL TEACHERS (COMBINED) EMPLOYED IN TAS, 1997



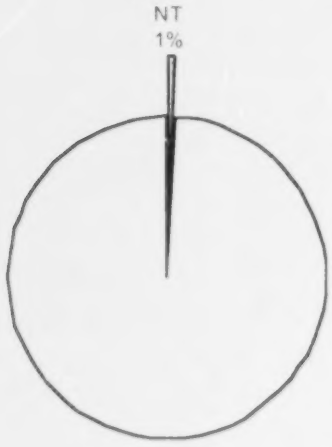
In 1997 an annual average of approximately 5,900 primary and secondary school teachers were employed in Tasmania according to ABS Labour Force Survey estimates. Of these 3,300 were primary school teachers and 2,600 were secondary school teachers, representing 3 per cent and 2 per cent respectively of Australian employment in these occupations.

Both primary and secondary school teachers are in balance to minor oversupply in Tasmania, although there are recruitment difficulties for some specialisations of secondary school teaching. Currently (early 1998) recruitment problems are occurring in maths/science, computer science, physical education, music and industrial arts. These recruitment difficulties, numerically very small, are more evident outside the major population centres.

The number of enrolments in Tasmanian primary schools is expected to remain relatively steady over the next five years, while the number of enrolments in secondary schools is expected to fall by an annual average of between 1 per cent and 2 per cent over the same period.

Northern Territory

PROPORTION OF PRIMARY AND SECONDARY SCHOOL TEACHERS (COMBINED) EMPLOYED IN NT, 1997



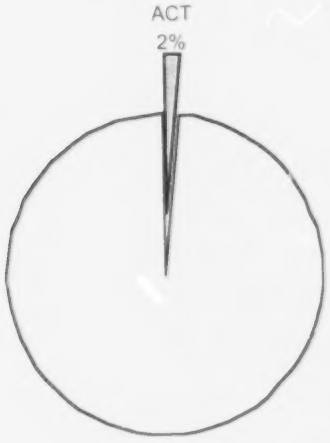
In 1997 an annual average of approximately 2,200 primary and secondary school teachers were employed in the Northern Territory according to ABS Labour Force Survey estimates. Of these 1,500 were primary school teachers and 800 were secondary school teachers, each representing 1 per cent of Australian employment in these occupations.

There is at present a shortage of primary and secondary teachers in the Northern Territory. The current labour market for school teachers in the Northern Territory is characterised by high staff turnover/wastage, varying depending upon locality. This high turnover results in a dilution of experience and shortages of experienced teachers in some specialisations and localities. The particular specialisations in shortage and localities of the shortage can vary within relatively short time frames. The shortfall in experienced school teachers is "made up" by recruiting new staff with varying degrees of experience, essentially from interstate.

The Government sector is finding it difficult to recruit senior mathematics, business studies (particularly economics and accounting) and senior sciences (physics and chemistry) teachers from interstate. Other subject areas including information technology and home economics have also proved difficult to fill, although the numbers required are small. The Catholic Education sector has also experienced some difficulty recruiting mathematics and science teachers, particularly mathematics, and to a lesser extent home economics specialists. The labour market for school teachers in 5 years will be dependent upon the interstate labour markets.

Australian Capital Territory

PROPORTION OF PRIMARY AND SECONDARY SCHOOL TEACHERS (COMBINED) EMPLOYED IN ACT, 1997



In 1997 an annual average of approximately 4,300 primary and secondary school teachers were employed in the Australian Capital Territory according to ABS Labour Force Survey estimates. Of these 2,300 were primary school teachers and 2,000 were secondary school teachers, each representing 2 per cent of Australian employment in these occupations.

An oversupply of school teachers exists in the ACT and has persisted for several years. This has created a large pool of unemployed and underemployed teachers, many of whom are seeking full-time teaching positions.

Generally employers report no difficulty in recruiting primary school teachers, although in the government sector some difficulty was reported finding general teachers who could also teach LOTE, as opposed to LOTE specialists. The labour market for primary school teachers is expected to remain in oversupply in the medium term.

The labour market for secondary teachers is also oversupplied in general, but some recruitment difficulties exist for specialisations in the secondary sector. However, employers pointed out that difficulties with specialisations tend to be short term, and a subject area that was experiencing recruitment difficulties in one year can easily be in oversupply the next. Recruitment difficulties were reported for qualified teachers of industrial arts (eg, wood and metal work), design and technology, and computer aided drafting (CAD). The labour market for maths/science or maths/physics teachers is also tight, with recruitment problems particularly evident for teachers experienced in Year 11 and 12. The Catholic sector also reported some recruitment problems for qualified LOTE teachers, particularly Japanese.

Overall the labour market for secondary school teachers will start to move closer to balance in the medium term, with continued recruitment difficulties in some small specialist areas.

APPENDIX A

NUMBER OF FULL-TIME PRIMARY STUDENTS IN ALL SCHOOLS: AGE AND LEVEL OF EDUCATION AUSTRALIA 1997

Year of education	Age at 1 July											Total
	5 and under	6	7	8	9	10	11	12	13	14	15 and over	
Pre-Year 1*	150,686	38,685	454	58	14	-	1	1	-	-	1	189,900
1	35,335	189,858	41,822	592	81	18	16	1	-	-	1	267,724
2	68	35,200	187,117	38,690	632	97	38	23	11	9	22	261,907
3	1	71	33,914	184,369	39,275	638	100	34	8	2	2	258,414
4	-	1	137	33,123	182,016	37,996	670	72	9	25	12	254,061
5	-	-	20	135	32,322	183,161	36,923	678	49	11	10	253,309
6	-	-	-	8	157	32,813	184,976	37,043	770	56	18	255,841
7**	-	-	-	-	4	170	30,062	63,667	5,000	119	121	99,143
Ungraded	1,583	1,557	1,785	2,048	2,293	2,400	2,458	1,092	165	48	61	15,490
Total	187,673	265,372	265,249	259,023	256,794	257,293	255,244	102,611	6,012	270	248	1,855,789

*Pre-year does not exist in Qld or WA. **Year 7 is only for QLD, SA, WA, NT. In other areas Year 7 is in secondary school.

Source: *Schools Australia* 1997, ABS Catalogue. No. 4221.0, Table 47

PERCENTAGE OF FULL-TIME PRIMARY STUDENTS IN ALL SCHOOLS: AGE AND LEVEL OF EDUCATION AUSTRALIA 1997

Year of education	Age at 1 July											Total
	5 and under	6	7	8	9	10	11	12	13	14	15 and over	
Pre-Year 1*	8.1	2.1	0.0	0.0	0.0	-	0.0	0.0	-	-	0.0	10.2
1	1.9	10.2	2.3	0.0	0.0	0.0	0.0	0.0	-	-	0.0	14.4
2	0.0	1.9	10.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1
3	0.0	0.0	1.8	9.9	2.1	0.0	0.0	0.0	0.0	0.0	0.0	13.9
4	-	0.0	0.0	1.8	9.8	2.0	0.0	0.0	0.0	0.0	0.0	13.7
5	-	-	0.0	0.0	1.7	9.9	2.0	0.0	0.0	0.0	0.0	13.6
6	-	-	-	0.0	0.0	1.8	10.0	2.0	0.0	0.0	0.0	13.8
7**	-	-	-	-	0.0	0.0	1.6	3.4	0.3	0.0	0.0	5.3
Ungraded	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.8
Total	10.1	14.3	14.3	14.0	13.8	13.9	13.8	5.5	0.3	0.0	0.0	100.0

*Pre-year does not exist in Qld or WA. **Year 7 is only for QLD, SA, WA, NT. In other areas Year 7 is in secondary school.

Source: *Schools Australia* 1997, ABS Catalogue. No. 4221.0, Table 47

NUMBER OF FULL-TIME SECONDARY STUDENTS IN ALL SCHOOLS: AGE AND LEVEL OF EDUCATION AUSTRALIA 1997

Year of education	Age at 1 July											Total
	10 or less	11	12	13	14	15	16	17	18	19	20 and over	
7*	74	2,526	121,896	32,392	851	37	5	5	-	-	-	157,786
8	3	186	32,774	184,231	37,899	1,184	116	32	6	3	9	256,443
9	1	2	188	32,467	184,982	36,991	1,546	184	36	10	8	256,415
10	-	-	11	130	31,000	174,292	36,544	2,530	507	132	307	245,453
11	-	-	1	13	150	26,757	145,160	30,752	3,536	1,033	1,314	208,716
12	-	-	-	2	8	85	22,509	119,129	25,461	3,253	2,325	172,772
Ungraded	17	129	1,955	3,168	3,544	3,042	2,450	1,795	911	361	878	18,250
Total	95	2,843	156,825	252,403	258,434	242,388	208,330	154,427	30,457	4,792	4,541	1,315,835

*Year 7 is only for NSW, Vic, Tas and the ACT. In other areas Year 7 is in primary school.
Source: *Schools Australia* 1997, ABS Catalogue. No. 4221.0, Table 47

PERCENTAGE OF FULL-TIME SECONDARY STUDENTS IN ALL SCHOOLS: AGE AND LEVEL OF EDUCATION AUSTRALIA 1997

Year of education	Age at 1 July											Total
	10	11	12	13	14	15	16	17	18	19	20 and over	
7*	0.0	0.2	9.3	2.5	0.1	0.0	0.0	-	-	-	-	12.0
8	0.0	0.0	2.5	14.0	2.9	0.1	0.0	0.0	0.0	0.0	0.0	19.5
9	-	0.0	0.0	2.5	14.1	2.8	0.1	0.0	0.0	0.0	0.0	19.5
10	-	-	0.0	0.0	2.4	13.2	2.8	0.2	0.0	0.0	0.0	18.7
11	-	-	0.0	0.0	0.0	2.0	11.0	2.3	0.3	0.1	0.1	15.9
12	-	-	-	0.0	0.0	0.0	1.7	9.1	1.9	0.2	0.2	13.1
Ungraded	0.0	0.0	0.1	0.2	0.3	0.2	0.2	0.1	0.1	0.0	0.1	1.4
Total	0.0	0.2	11.9	19.2	19.6	18.4	15.8	11.7	2.3	0.4	0.4	100.0

*Year 7 is only for NSW, Vic, Tas and the ACT. In other areas Year 7 is in primary school.
Source: *Schools Australia* 1997, ABS Catalogue. No. 4221.0, Table 47

APPENDIX B

NUMBER OF FULL-TIME PRIMARY STUDENTS BY STATE AND CATEGORY OF SCHOOL 1997

	Government	Non-government				All Schools
		Anglican	Catholic	Other	Total	
NSW	453,142	8,828	120,168	32,781	161,777	614,919
VIC	304,773	7,543	101,310	24,512	133,365	438,138
QLD	267,147[1]	5,398	54,605	20,534	80,537	347,684
SA	118,812	4,652	24,479	12,732	41,863	160,675
WA	145,088	3,612	31,178	9,970	44,760	189,848
TAS	35,663	794	7,321	2,693	10,808	46,471
NT	20,350	-	3,607	1,413	5,020	25,370
ACT	22,032	914	8,683	1,055	10,652	32,684
Australia	1,367,007	31,741	351,351	105,690	488,782	1,855,789

[1] Education Queensland advise that if preschool students are included the total is 284,062

Source: *Schools Australia* 1997, ABS Catalogue. No. 4221.0, Table 4

PERCENTAGE OF FULL-TIME PRIMARY STUDENTS BY STATE AND CATEGORY OF SCHOOL 1997

	Government	Non-government				All Schools
		Anglican	Catholic	Other	Total	
NSW	73.7	1.4	19.5	5.3	26.3	100.0
VIC	69.6	1.7	23.1	5.6	30.4	100.0
QLD	76.8	1.6	15.7	5.9	23.2	100.0
SA	73.9	2.9	15.2	7.9	26.1	100.0
WA	76.4	1.9	16.4	5.3	23.6	100.0
TAS	76.7	1.7	15.8	5.8	23.3	100.0
NT	80.2	-	14.2	5.6	19.8	100.0
ACT	67.4	2.8	26.6	3.2	32.6	100.0
Australia	73.7	1.7	18.9	5.7	26.3	100.0

Source: *Schools Australia* 1997, ABS Catalogue. No. 4221.0, Table 4

PERCENTAGE OF FULL-TIME PRIMARY STUDENTS BY STATE AND CATEGORY OF SCHOOL 1997

	Government	Non-government				All Schools
		Anglican	Catholic	Other	Total	
NSW	24.4	0.5	6.5	1.8	8.7	33.1
VIC	16.4	0.4	5.5	1.3	7.2	23.6
QLD	14.4	0.3	2.9	1.1	4.3	18.7
SA	6.4	0.3	1.3	0.7	2.3	8.7
WA	7.8	0.2	1.7	0.5	2.4	10.2
TAS	1.9	0.0	0.4	0.1	0.6	2.5
NT	1.1	-	0.2	0.1	0.3	1.4
ACT	1.2	0.0	0.5	0.1	0.6	1.8
Australia	73.7	1.7	18.9	5.7	26.3	100.0

Source: *Schools Australia* 1997, ABS Catalogue. No. 4221.0, Table 4

PERCENTAGE OF FULL-TIME PRIMARY STUDENTS BY STATE AND CATEGORY OF SCHOOL 1992

	Government	Non-government				All Schools
		Anglican	Catholic	Other	Total	
NSW	24.7	0.4	6.7	1.4	8.6	33.3
VIC	16.8	0.4	5.6	1.1	7.1	24.0
QLD	14.2	0.2	2.9	0.8	3.9	18.1
SA	6.9	0.2	1.2	0.6	1.9	8.8
WA	7.9	0.2	1.6	0.4	2.1	10.0
TAS	2.1	0.1	0.4	0.1	0.6	2.7
NT	1.0	-	0.2	0.1	0.2	1.3
ACT	1.2	0.0	0.5	0.1	0.6	1.8
Australia	74.9	1.5	19.0	4.6	25.1	100.0

Source: *Schools Australia* 1990, ABS Catalogue. No. 4221.0, Table 4

NUMBER OF FULL-TIME SECONDARY STUDENTS BY STATE AND CATEGORY OF SCHOOL 1997

	Government	Non-government				All Schools
		Anglican	Catholic	Other	Total	
NSW	309,775	16,832	100,455	32,239	149,526	459,301
VIC	213,703	18,243	75,981	35,359	129,583	343,286
QLD	148,116	10,670	42,021	26,615	79,306	227,422
SA	57,699	4,425	15,519	9,622	29,566	87,265
WA	80,987	7,763	22,621	9,858	40,242	121,229
TAS	27,258	1,943	5,915	2,570	10,428	37,686
NT	7,944	719	1,402	1,031	3,152	11,096
ACT	17,563	2,789	7,675	523	10,987	28,550
Australia	863,045	63,384	271,589	117,817	452,790	1,315,835

Source: *Schools Australia* 1997, ABS Catalogue. No. 4221.0, Table 4

PERCENTAGE OF FULL-TIME SECONDARY STUDENTS BY STATE AND CATEGORY OF SCHOOL 1997

	Government	Non-government				All Schools
		Anglican	Catholic	Other	Total	
NSW	67.4	3.7	21.9	7.0	32.6	100.0
VIC	62.3	5.3	22.1	10.3	37.7	100.0
QLD	65.1	4.7	18.5	11.7	34.9	100.0
SA	66.1	5.1	17.8	11.0	33.9	100.0
WA	66.8	6.4	18.7	8.1	33.2	100.0
TAS	72.3	5.2	15.7	6.8	27.7	100.0
NT	71.6	6.5	12.6	9.3	28.4	100.0
ACT	61.5	9.8	26.9	1.8	38.5	100.0
Australia	65.6	4.8	20.6	9.0	34.4	100.0

Source: *Schools Australia* 1997, ABS Catalogue. No. 4221.0, Table 4

PERCENTAGE OF FULL-TIME SECONDARY STUDENTS BY STATE AND CATEGORY OF SCHOOL 1997

	Government	Non-government				All Schools
		Anglican	Catholic	Other	Total	
NSW	23.5	1.3	7.6	2.5	11.4	34.9
VIC	16.2	1.4	5.8	2.7	9.8	26.1
QLD	11.3	0.8	3.2	2.0	6.0	17.3
SA	4.4	0.3	1.2	0.7	2.2	6.6
WA	6.2	0.6	1.7	0.7	3.1	9.2
TAS	2.1	0.1	0.4	0.2	0.8	2.9
NT	0.6	0.1	0.1	0.1	0.2	0.8
ACT	1.3	0.2	0.6	0.0	0.8	2.2
Australia	65.6	4.8	20.6	9.0	34.4	100.0

Source: *Schools Australia* 1997, ABS Catalogue. No. 4221.0, Table 4

PERCENTAGE OF FULL-TIME SECONDARY STUDENTS BY STATE AND CATEGORY OF SCHOOL 1992

	Government	Non-government				All Schools
		Anglican	Catholic	Other	Total	
NSW	24.0	1.2	7.4	2.1	10.7	34.7
VIC	17.8	1.4	5.8	2.4	9.7	27.4
QLD	11.2	0.6	2.8	1.6	5.1	16.3
SA	4.9	0.3	1.1	0.6	2.0	6.9
WA	6.0	0.5	1.6	0.6	2.6	8.7
TAS	2.1	0.1	0.4	0.2	0.7	2.9
NT	0.6	0.0	0.1	0.0	0.2	0.8
ACT	1.4	0.2	0.6	0.0	0.8	2.2
Australia	68.2	4.5	19.8	7.6	31.8	100.0

Source: *Schools Australia* 1990, ABS Catalogue. No. 4221.0, Table 4

APPENDIX C

CONSOLIDATED TABLES FROM STATE SURVEY RETURNS

PRIMARY SCHOOLS

C 1. FULL-TIME EQUIVALENT OF TEACHERS EMPLOYED IN THE GOVERNMENT SECTOR - actual for August 1997, preliminary for 1998 and anticipated for subsequent years

	1997	1998	1999	2000	2001
NSW	25,248[1]	25,458	25,755	25,936	25,940
VIC	16,985	16,945	16,965	16,979	16,913
QLD	14,638	14,850	15,013	15,222	15,460
SA[2]	7,064	6,998	6,932	6,897	6,861
WA	7,874	7,886	7,922	7,910	7,899
TAS	2,427	2,361	2,386	2,388	2,370
NT	1,317	1,421[3]	1,421	1,435	1,450
ACT	1,194	1,203	1,175	1,165	1,155
TOTAL-AUST	**76,747**	**77,122**	**77,569**	**77,932**	**78,048**

(1) Based on figures as at 30/6/97 and consistent with figures provided for the National Schools Statistics Collection.

(2) Includes student counsellors

(3) Data is for the period 5 March 1998 to 18 March 1998

Refer to Explanatory Notes (page 61) for further details on WA data for all tables in this Appendix

C 2a. NUMBER OF TEACHERS EMPLOYED BY AGE GROUP - GOVERNMENT SECTOR actual for August 1997

	<25	25-34	35-44	45-49	50-54	55-59	60+
NSW	449	4,245	8,990	4,850	3,423	1,550	307
VIC	592	2,566	7,649	3,860	2,511	593	105
QLD	697	4,629	4,923	2,166	1,362	696	165
SA	395	1,164	3,232	1,537	1,101	312	47
WA[1]	228	1,727	3,116	1,772	1,047	729	252
TAS	123	482	1,077	419	327	163	40
NT	41	401	547	236	186	86	27
ACT	64	187	327	292	278	101	10
AVERAGE	**324**	**1,925**	**3,733**	**1,892**	**1,279**	**529**	**119**

(1) Data is for 30 September 1997

PRIMARY SCHOOLS

C 2b. PERCENTAGE OF TEACHERS EMPLOYED BY AGE GROUP - GOVERNMENT SECTOR actual for August 1997

	<25	25-34	35-44	45-49	50-54	55-59	60+	% over 45
NSW	1.9	17.8	37.8	20.4	14.4	6.5	1.3	**42.5**
VIC	3.3	14.4	42.8	21.6	14.0	3.3	0.6	**39.5**
QLD	4.8	31.6	33.6	14.8	9.3	4.8	1.1	**30.0**
SA	5.1	14.9	41.5	19.7	14.1	4.0	0.6	**38.5**
WA	2.6	19.5	35.1	20.0	11.8	8.2	2.8	**42.8**
TAS	4.7	18.3	40.9	15.9	12.4	6.2	1.5	**36.1**
NT	2.7	26.3	35.9	15.5	12.2	5.6	1.8	**35.1**
ACT	5.1	14.9	26.0	23.2	22.1	8.6	0.8	**54.1**
AVERAGE	**3.3**	**19.6**	**38.1**	**19.3**	**13.1**	**5.4**	**1.2**	**39.0**

C 3a. FULL-TIME EQUIVALENT OF TEACHERS EMPLOYED BY STATUS - actual for August 1997

	PERMANENT/ ONGOING	FIXED TERM EMPLOYMENT	TOTAL
NSW	25,248	0[1]	25,248
VIC	14,626	2,251	16,877
QLD	13,541	1,097	14,638
SA	6,014	1,050	7,064
WA[2]	7,117	1,754	8,871
TAS	2,014	413	2,427
NT	1,073	244	1,317
ACT	1,089	106	1,194
AVERAGE	**8,840**	**864**	**9,704**

(1) NSW Department of Education and Training does not employ fixed term employment teachers. It supplied the number of casual teachers employed (headcount) of 121,198 for the month of August 1997.

(2) Data are for persons, not full-time equivalent

PRIMARY SCHOOLS

C 3b. PERCENTAGE OF TEACHERS (FTE) EMPLOYED BY STATUS - actual for August 1997

	PERMANENT/ ONGOING	FIXED TERM EMPLOYMENT	TOTAL
NSW	100.0	0[1]	100
VIC	86.7	13.3	100
QLD	92.5	7.5	100
SA	85.1	14.9	100
WA[2]	80.2	19.8	100
TAS	83.0	17.0	100
NT	81.5	18.5	100
ACT	91.2	8.8	100
AVERAGE	91.1	8.9	100

(1) NSW Department of Education and Training does not employ fixed term employment teachers. It supplied the number of casual teachers employed (headcount) of 121,198 for the month of August 1997.

(2) Data are for persons, not full-time equivalent

CONSOLIDATED TABLES FROM STATE SURVEY RETURNS -

SECONDARY SCHOOLS

C 4. FULL-TIME EQUIVALENT OF TEACHERS EMPLOYED IN GOVERNMENT SECTOR - actual for August 1997, preliminary for 1998 and anticipated for subsequent years

	1997	1998	1999	2000	2001
NSW	24,155[1]	24,357	24,704	24,615	24,019
VIC	17,170	17,030	17,178	17,218	17,274
QLD	11,218	11,344	11,425	11,398	11,383
SA[2]	5,194	5,282	5,342	5,325	5,265
WA	6,266	6,342	6,391	6,413	6,434
TAS	2,199	2,133	2,179	2,197	2,196
NT	600	637[3]	640	640	640
ACT	1,364	1,394	1,350	1,340	1,330
TOTAL-AUST	**68,166**	**68,519**	**69,209**	**69,146**	**68,541**

(1) Based on figures as at 30/6/97 and consistent with figures provided for the National Schools Statistics Collection.

(2) Includes student counsellors and is based on FTE student numbers, not full-time students.

(3) Data is for the period 5 March 1998 to 18 March 1998.

C 5a. NUMBER OF TEACHERS EMPLOYED BY AGE GROUP - GOVERNMENT SECTOR actual for August 1997

	<25	25-34	35-44	45-49	50-54	55-59	60+
NSW	492	4,595	8,374	4,892	3,024	1,417	274
VIC	475	3,128	6,992	4,224	2,605	699	174
QLD	487	3,410	3,723	1,838	1,197	468	96
SA	164	768	1,972	1,422	846	260	44
WA	222	1,873	2,321	1,332	1,030	577	199
TAS	88	432	935	467	291	125	28
NT	8	139	211	143	101	45	10
ACT	33	220	396	361	260	111	22
AVERAGE	**246**	**1,821**	**3,116**	**1,835**	**1,169**	**463**	**106**

SECONDARY SCHOOLS

C 5b. PERCENTAGE OF TEACHERS EMPLOYED BY AGE GROUP - GOVERNMENT SECTOR actual for August 1997

	<25	25-34	35-44	45-49	50-54	55-59	60+	% over 45
NSW	2.1	19.9	36.3	21.2	13.1	6.1	1.2	**41.6**
VIC	2.6	17.1	38.2	23.1	14.2	3.8	1.0	**42.1**
QLD	4.3	30.4	33.2	16.4	10.7	4.2	0.9	**32.1**
SA	3.0	14.0	36.0	26.0	15.4	4.7	0.8	**47.0**
WA	2.9	24.8	30.7	17.6	13.6	7.6	2.6	**41.5**
TAS	3.7	18.3	39.5	19.7	12.3	5.3	1.2	**38.5**
NT	1.2	21.2	32.1	21.8	15.4	6.8	1.5	**45.5**
ACT	2.4	15.7	28.2	25.7	18.5	7.9	1.6	**53.7**
AVERAGE	**2.8**	**20.8**	**35.6**	**21.0**	**13.4**	**5.3**	**1.2**	**40.8**

C 6a. FULL-TIME EQUIVALENT OF TEACHERS EMPLOYED BY STATUS - actual for August 1997

	PERMANENT/ ONGOING	FIXED TERM EMPLOYMENT	TOTAL
NSW	24,155[1]	0[1]	24,155
VIC	15,043	2,120	17,163
QLD	10,590	628	11,218
SA	4,583	611	5,194
WA[2]	5,759	1,795	7,554
TAS	1,736	463	2,199
NT	489	111	600
ACT	1,272	92	1,364
AVERAGE	**7,953**	**728**	**8,681**

(1) NSW Department of Education and Training does not employ fixed term employment teachers. It supplied the number of casual teachers employed (headcount) of 7,630 for the month of August 1997.

(2) Data are for persons, not full-time equivalent

SECONDARY SCHOOLS

C 6b. PERCENTAGE OF TEACHERS (FTE) EMPLOYED BY STATUS - actual for August 1997

	PERMANENT/ ONGOING	FIXED TERM EMPLOYMENT	TOTAL
NSW	100.0	0[1]	100
VIC	87.6	12.4	100
QLD	94.4	5.6	100
SA	88.2	11.8	100
WA[2]	76.2	23.8	100
TAS	78.9	21.1	100
NT	81.5	18.5	100
ACT	93.3	6.7	100
AVERAGE	**91.6**	**8.4**	**100**

(1) NSW Department of Education and Training does not employ fixed term employment teachers. It supplied the number of casual teachers employed (headcount) of 7,630 for the month of August 1997.

(2) Data are for persons, not full-time equivalent

EXPLANATORY NOTES

Definition of *Primary* in Western Australia

In Western Australia primary school officially commences in Year 1, typically in the year in which the child turns 6. However, Western Australia is moving towards the primary model in other States with a pre-year 1. The 5 year old programme in Western Australia could be seen as a defacto 'pre-year 1' as over 90 per cent of the 5 year old cohort participates in this programme. Currently most of the non-government schools run full-time 5 year old programmes. The government is implementing a full-time 5 year old programme in the year 2002 and is changing the school starting age also in line with other States.

In Western Australia a distinction is made between primary and pre-primary teachers. Primary teachers teach Years 1 to 7 and pre-primary teachers work with kindergarten, pre-primary (5 year olds) and Years 1 to 3. Primary and pre-primary teachers are therefore treated separately for the purpose of labour market forecasting and analysis.

APPENDIX D

HIGHER EDUCATION COMMENCING ENROLMENTS IN TEACHER EDUCATION BY STATE, 1990 TO 1997

Initial Primary Teacher Education

	1990	1991	1992	1993	1994	1995	1996	1997[1]
NSW	1898	1182	1345	1319	1367	1645	1545	1335
VIC	2155	1060	1321	1352	1120	1067	1151	1179
QLD	1942	853	826	855	816	1201	1448	1771
WA	841	540	623	589	644	675	255	367
SA	659	622	500	499	520	574	575	679
TAS	161	0	0	0	0	0	0	0
NT	113	199	225	64	0	0	0	0
ACT	214	103	94	125	89	88	115	114
MULTI STATE		408	532	786	399	330	342	467
AUSTRALIA	7983	4967	5466	5589	4955	5580	5431	5912

Initial Secondary Teacher Education

	1990	1991	1992	1993	1994	1995	1996	1997[1]
NSW	1725	1734	1609	1830	1931	1995	2006	2087
VIC	2349	1645	1873	1695	1402	1383	1175	1354
QLD	1261	743	1256	1285	1211	1076	1079	1743
WA	724	579	671	649	533	606	975	982
SA	294	356	170	173	176	144	171	52
TAS	0	0	0	0	0	0	0	0
NT	18	22	34	23	20	27	6	32
ACT	147	213	156	165	150	169	178	233
MULTI STATE		382	416	353	327	431	336	413
AUSTRALIA	6518	5674	6185	6173	5750	5831	5926	6896

Initial School Teacher Education - general

	1990	1991	1992	1993	1994	1995	1996	1997[1]
NSW	109	558	466	485	374	166	563	702
VIC	527	639	415	362	18	19	193	383
QLD	117	101	74	86	5	0	1	68
WA	46	122	162	193	143	0	0	0
SA	0	0	0	0	0	0	0	0
TAS	141	360	359	311	283	355	370	426
NT	0	0	0	51	79	1	207	193
ACT	0	0	0	0	0	0	0	0
MULTI STATE	0	0	0	0	0	0	0	0
AUSTRALIA	940	1780	1476	1488	902	541	1334	1772

Initial Early Childhood Teacher Education

	1990	1991	1992	1993	1994	1995	1996	1997[1]
NSW	662	711	813	723	721	993	1018	770
VIC	354	392	347	353	300	233	287	285
QLD	312	267	213	208	377	436	436	506
WA	176	156	144	140	160	186	149	188
SA	139	124	118	130	125	157	168	192
TAS	0	0	0	0	0	0	0	0
NT	0	0	0	0	20	138	86	145
ACT	41	70	33	27	45	55	53	56
MULTI STATE			0	0	0	0	0	0
AUSTRALIA	1684	1720	1668	1581	1748	2198	2197	2142

[1] Data for 1997 were compiled in a different way to data for prior years. The 1997 data take into account the coding of Combined Courses to two fields of study. As a consequence , the total for some fields of study show larger increases than would be the case if data for only one field were to be counted.

Source: DEETYA, *Higher Education Student Data Collection*

HIGHER EDUCATION COURSE COMPLETIONS IN TEACHER EDUCATION BY STATE, 1989 TO 1996

Initial Primary Teacher Education - general

	1989	1990	1991	1992	1993	1994	1995	1996
NSW	1458	1461	1673	1288	1434	1195	1122	1063
VIC	1519	1444	1302	1125	1173	977	843	453
QLD	1126	1043	1314	984	744	585	545	511
WA	486	480	567	542	529	426	459	411
SA	478	435	422	343	410	416	362	407
TAS	19	72	14	14	14	11	11	4
NT	59	91	40	47	1	0	0	0
ACT	172	190	151	58	79	73	58	62
MULTI STATE				651	616	376	310	219
AUSTRALIA	5317	5216	5483	5052	5000	4059	3710	3130

Initial Secondary Teacher Education

	1989	1990	1991	1992	1993	1994	1995	1996
NSW	1412	1016	1182	1222	1300	1418	1541	1297
VIC	1835	1695	1729	1361	1617	1281	1221	993
QLD	902	984	924	599	867	740	746	868
WA	462	499	476	460	469	384	376	373
SA	300	301	127	153	90	99	95	100
TAS	87	20	8	1	0	0	0	0
NT	7	16	16	26	18	17	23	14
ACT	106	84	108	109	108	105	115	132
MULTI STATE				338	324	287	316	283
AUSTRALIA	5111	4615	4570	4269	4793	4331	4427	4060

Initial School Teacher Education - general

	1989	1990	1991	1992	1993	1994	1995	1996
NSW	90	178	239	333	362	295	118	187
VIC	348	360	478	394	3	4	18	199
QLD	0	0	76	115	95	45	36	20
WA	0	0	0	0	0	0	0	0
SA	0	0	0	0	0	0	0	0
TAS	131	89	201	208	248	326	284	266
NT	0	0	0	36	41	34	34	29
ACT	0	0	0	0	0	0	0	0
MULTI STATE								
AUSTRALIA	569	627	994	1086	749	704	490	701

Initial Early Childhood Teacher Education

	1989	1990	1991	1992	1993	1994	1995	1996
NSW	295	412	421	424	527	477	467	456
VIC	212	273	241	292	205	185	173	149
QLD	161	161	225	265	151	144	144	202
WA	100	119	118	136	120	137	104	123
SA	81	83	101	21	80	88	38	69
TAS	17	1	0	0	0	0	0	0
NT	0	0	0	0	0	0	1	1
ACT	33	25	26	25	23	39	25	20
MULTI STATE								
AUSTRALIA	899	1074	1132	1163	1106	1070	952	1020

Source: DEETYA, *Higher Education Student Data Collection*